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ORIGINAL COMMUNICATIONS.

"Qui Docet Docit."

ART. I.—HINTS ON THE USE OF SPONGE TENTS IN UTERINE AFFECTIONS. By J. C. NOTT, M. D., Professor of Surgery, Mobile, Ala.

It would seem paradoxical to assert, that *sponge tents*, or any other one remedy is applicable to the treatment of maladies apparently so opposite as suppression of the menses, dysmenorrhœa and menorrhagia, and yet the facts I shall give will bear me out in the belief that certain forms of each of these affections are better treated by this remedy than by all others combined. The principles, too, on which they act in each case, are well recognized in every treatise on inflammation.

A common, I may say the most common cause of dysmenorrhœa, is mechanical obstruction to the menstrual flow from narrowness of some part of the cervical channel of the uterus, whether congenital or acquired. In such cases all agree that *dilitation is the remedy*, although much diversity of opinion exists as to the best manner of effecting it. The sponge tent certainly answers well in many cases, and if properly managed, my experience is, that it will meet all the

indications in the great majority of cases. It being admitted then, that sponge tents are a remedy for dysmenorrhœa, I will not consume time on this point, but proceed at once to show their applicability to amenorrhœa and menorrhagia. It will incidentally appear, too, that when these diseases are relieved, many cases of version and flexion, depending on such derangements of function, disappear with the original disease.

Case 1.—Mrs. D——, from the interior of Alabama, came to consult me on the 7th December, 1866, giving the following history: Aged 28; had originally an excellent constitution, and weighed 140 pounds when married; married early and had one child at term, which is still living; had a miscarriage seven years ago, since which time her health has been bad, and she has not been pregnant. She is now pallid, emaciated, dyspeptic and nervous; suffers occasionally, generally at intervals of three or four weeks, with severe uterine pains, to relieve which she has got in the habit of taking four or five grains of morphine daily. She is also in the habit of "dipping" snuff.

Further, states that for years since the miscarriage, she had laboured under troublesome leucorrhœa, with ulceration of os uteri, for which she was treated in the country by several Physicians; had exhausted all remedies, general and local, and among others, had used caustics repeatedly to the ulcers. Menstruation had been pretty regular, until the last fourteen months, during which time the *suppression had been complete*, and it was during the existence of this suppression that she had suffered from the uterine pains above alluded to.

On examination with the speculum, I was struck by the remarkably healthy appearance of the vagina and the entire absence of leucorrhœa. The uterus was completely anteverted, the fundus presenting, at the lower part of the symphysis pubis, the os tilted up towards the promontory of sacrum, and difficult to reach. By means of two fingers of one hand in the vagina, and the other on the abdomen, I, without much difficulty, pushed the fundus up and drew the cervix down in place. After, however, getting the os, as I supposed, in its normal position, and one favorable for inspection,

I introduced Emmet's short bi-valve speculum, but was unable to detect by sight any *os or cervix uteri*—the vagina presented at its inner extremity the appearance of a smooth oval cul-de-sac, without a uterus, and the uterus was, in reality, entirely outside of the vagina. While replacing the uterus, before introducing the speculum, I had distinctly felt the cervix, but it could not now be seen. On a close inspection I detected at one point a minute dimple, about such as pressure of the point of a small probe on the palm of the hand, for a second or two, would make; there was, however, no opening at all. By the touch I could feel distinctly around this dimple, and on the outside of the vaginal walls a hard mass, which I took to be the uterus. I then, in the presence of Dr. F. E. Gordon, who was assisting me, made a puncture at the dimple with a bistoury, and had the satisfaction to see at once that I had hit the os. A few drops of fluid, resembling synovia, oozed out, and Simpson's sound was at once introduced without impediment to the fundus. I then made a crucial incision, which only involved a tegumentary covering to the os, not thicker than a piece of kid skin.

From the facts that she had been treated by caustics and had not menstruated for 14 months, the natural conclusion was that the closure was the result of the treatment—granulations had doubtless sprouted from the opposing surfaces and adhered. There seemed to be no contraction of the cervical canal, beyond the os externum.—It was evident that there had been no menstruation for a long time, as not a drop of colored fluid escaped then, or for two months afterwards from the uterus.

I introduced immediately, a good sized sponge tent, two inches long, into the uterus and allowed it to remain till next morning, when it was removed—it produced no uneasiness and the os was well dilated. The sponge tents were introduced daily for a week, for the double purpose of preventing closure, and of *stimulating the organ and producing a hyperæmic, with the view of provoking the menstrual flow.*

Dec. 18th.—Sent home to-day much improved in general health; has been taking pills of strychnine, iron by hydrogen and quinine; appetite and digestion good. It is worthy of remark that *the*

anteversion has disappeared—a result attributable to the hyperæmia of cervix produced by the sponge tents. Directed to continue the tonic pills and to return to Mobile in a month.

Jan. 19th—Returned to Mobile yesterday at the appointed time, but in feeble condition. The weather during the journey home was exceedingly cold and inclement, causing a severe attack of pneumonia, from which she is just convalescing—although the cough has almost disappeared she is more feeble and reduced than when I first saw her.

On examination, the os uteri was found open, and the sound readily entered fully two and a half inches. The orifice being a little contracted, and feeling anxious to try more fully the stimulating effect of the sponge tents on the suppression, I again commenced their use. She has thus far had no sanguineous discharge and but slight leucorrhœa.

Jan. 25th.—The tents have now been continued for a week, although by the third day, the os was sufficiently dilated to admit the finger. I did not therefore see any reason to anticipate farther trouble from contraction of the outlet.

The general health, from the effects of pneumonia, protracted bad treatment of uterine affection, and the bad habits of morphine and "dipping" is far from being satisfactory. Her most troublesome symptom at present is dyspepsia, with its usual attendants in such cases. Advised the following tonic:

℞—Bi carb. Soda.....℥j.
Pulv. Cort. Cinchonæ.....℥j.
Pulv. Zingifer.....℥j.
Pulv. Rad. Gentian.....℥i.
Alcocol, dilute.....℈ij.

Dose, a tablespoonful after each meal.

She left for the country to-day, and it remains to be seen, what influence the treatment will have upon the reëstablishment of the general health and the menstrual flow.

About one month after her departure I had the gratification to receive a very satisfactory letter from her husband. I give an extract which will tell the rest of the tale better than I can.

"Dr. J. C. NOTT: Dear Sir,—Mrs. D. says you requested us to write you concerning her health, after the lapse of a month or two. She has regularly taken the tonic you prescribed, and we think to-day, if you could see her you would say her improvement equals, if it does not surpass your expectations. Her *menses* are all right. To give you some idea of her improvement, we will state this fact: she requires a garter one and a half inches longer than when you saw her last; she eats heartily and the digestion is good. If she improves in the same ratio for two months to come, her wardrobe will have to be refurnished entirely, because not a single dress she now wears will contain her."

Remarks.—This case is interesting in several particulars. 1st, it is remarkable that a woman who had borne a child, should present the anomaly of a *uterus with its cervix and os outside of the vaginal cavity*. The vagina instead of being reflected, as usual, from the sides of the cervix, passed smoothly across the *os tincæ*, leaving an opening at the os, which was entirely closed by the caustic treatment, and thus leaving no appearance of the uterus in the vagina except the almost imperceptible dimple which I have described. 2d. It shows the impropriety of using caustics, without guarding against the closure of the os. The Practitioner should bear in mind the fact that healthy granulations, when brought in apposition, unite as readily as incised wounds. 3d. It would be interesting to know positively what share the sponge tents had in reëtablishing the menstrual flow. She had exhausted tonics and all kinds of constitutional treatment, and yet for 14 months had no menstruation and the health was very bad. This fact, together with the one, that the *anteversion*, a few days after the commencement of the use of the tents, *disappeared, not to return*. The conclusion I think legitimate, that both the rectification of the position of the uterus, and the menstrual flow, are attributable to the hyperæmia induced by the tents. The consequent engorgement of the neck would naturally have the effect of keeping it in the most *pendent* position, while the revulson would relieve the engorgement of the fundus, produced by malposition.

CASE 2.—Mrs. B. S. had been subject to uterine hæmorrhages for four of five years—first at the menstrual periods, but for

the last year or two they have paid no respect to time. Her age is forty; has several grown children; been a widow for ten years.

Consulted me on the 10th December, 1866, giving the above history; was anæmic, feeble, dyspeptic, nervous; suffered no pain except some back-ache, and had but little leucorrhœa. I put her on the precipitated carbonate of iron and claret, telling her that it would be necessary, as soon as the hæmorrhage permitted, to make a proper examination with the speculum. No opportunity occurred until the 15th, when the examination was made. There was no malposition of the uterus, except some degree of prolapse from relaxation. The os was about three-quarters of an inch long; the lips were firmly pressed together along the middle part with an opening at each corner. A sound was easily introduced and carried to the fundus. Regarding the shape of the os an individual peculiarity, and supposing the cause of trouble to be a polypus or fibroid within, I determined to dilate the os fully with sponge, and explore the cavity of the uterus with the finger.

I commenced at once the use of tents, and continued them for about twelve to fifteen hours every day for a week, increasing daily the size. They gave no pain, and what is remarkable, provoked no hæmorrhage. On the 4th day, the tent, having no string attached, slipped from the forceps and disappeared in the cavity of the uterus. Being very stiff and hard, it immediately caused severe uterine pains—these, however, subsided in about twenty minutes, I presume, from the softening of the sponge; and the sponge was found loose in the vagina next morning. It is remarkable that even this irritation did not produce any hæmorrhage.

After using the tents for a week, and dilating the canal, as I supposed, sufficiently, she was fully chloroformed, and my right hand, well oiled, was introduced into the vagina. While the left hand, on the outside pressed firmly on the fundus, the index finger was, with little force, introduced up to the fundus; the most thorough exploration could detect nothing within the uterine cavity; as the finger, however, entered the os, there was a manifest fullness and hardness on the anterior and posterior surfaces of the canal, extending from the external os upwards, for at least three-fourths of an inch. These protuberances gave to the finger the

sensation of a fibroid formation. The os, though dilated sufficiently to allow the finger to enter without much force, and giving no resistance in its transverse diameter, *pressed the finger tightly in the antero-posterior diameter.*

The protuberances which I have described, must I think be regarded as *fibroid* developments in each lip, and as the only cause for the long continued hæmorrhages. There was no other discoverable disease.

Remarks.—Now it will be remembered, that Dr. J. Marion Sims gives cases where not only polypi, but small fibroids were removed by the pressure of sponge tents, and this case I regard as a good one, in illustration of their curative influence. It seems evident that the tents used a week before my exploration of the cavity and for a week afterwards not only provoked no hæmorrhage at the time, but prevented its subsequent occurrence since, now more than two months. Two menstrual periods have passed, at each of which the discharge came on naturally—continued very moderately until the fifth day when it ceased. During the menstrual periods she was kept in bed and between times has been taking exercise and improving steadily in health.

She has been taking the precipitated carbonate of iron, ten grains three times a day in a wine glass of claret wine, and given in this way, it has proved in my hands the most efficient of all the mortial preparations.

She has gained flesh and strength—appetite and digestion good—the complexion is improving, and there is every reason to believe that her health is in a fair way to be fully reëstablished. If any hæmorrhage recurs, I feel confident it will be relieved, as before, by the sponge tents.

Sponge Tents.—It is a matter of great practical importance not only to discriminate properly the class of cases in which these tents are to be used, but the manner of manufacturing them is also of no little importance. Where only a very small tent can be used, the *sea tangle* answers admirably and is probably superior to the sponge or any other material yet known. The only objection to

tents of this material is, that they are too small for dilitation beyond a very moderate degree—if several could be glued together so as to overcome this objection, probably they would fulfil all the indications. The usual mode of making the sponge tent is, after the sponge is cut of proper shape and size, to saturate it with mucilage of gum arabic, then run through its centre lengthwise a piece of strong, pointed wire; it is next firmly wrapped from end to end with a piece of twine, so as to compress it into the smallest possible space—after it is thoroughly dried the wire is taken out, and the twine removed. It is better to take the wire out before the sponge gets dry, as it is very difficult to remove after the dissication is complete. The next step is to trim the tent evenly down on the sides and sand-paper it smoothly—the tent is then ready for use, and may be introduced by putting a little lard or cerate on the point and passing it quickly in.

According to my experience, there are several decided objections to tents of this kind. 1st. They are generally wanting in the firmness necessary, and if there happens to be a little delay in their introduction, they absorb moisture, enlarge at the end and become difficult to manage. 2d. When the tent expands, from its porosity, it becomes entangled in the granulations or tissues with which it is in contact, produces irritation, and often lacerates the surface in extraction, causing more or less bleeding. 3d. Sponge is one of the most irritating substances (not caustic) that can be placed in contact with a denuded or tender surface. 4th. It soon becomes excessively putrid and offensive, and the more irritating from this quality.

To obviate the above objections I have added what I conceive to be a great improvement, viz: a covering of *gold beater's skin.*—After the tent is finished, as above described, take a piece of the skin, wide as the tent is long, and long enough, when rolled around it, to envelope the tent five or six times. The gold beater's skin is stretched on any flat surface; smeared over with common paste, and the tent rolled up in it. It is then laid aside, and after perfectly dry, several rows of perforations, with the point of a pen-knife, should be made through the skin, from end to end, of the tent, with a view to the easy entrance of moisture and its consequent

expansion. If these perforations are not made, the moisture of the parts can only find entrance at the extremities (which are left uncovered) and the expansion would be slow and difficult.

The advantages of tents made in this way are—

1st. They are smooth as a well made cigar, very firm, require no oiling, and are introduced with great facility.

2d. As they absorb moisture and expand, the gold beater's skin gradually unfolds, and maintains its relative position between the sponge and uterine surface, thus protecting the uterus against the peculiar irritation of the sponge.

3d. During their removal, the gold beater's skin protects the uterine surface against the entanglement which usually occurs between it and the common uncovered sponge tents and consequent abrasion.

It is always well after the tent is introduced, to retain it in situ by a tampon of cotton wool or lint, and in order to supply an abundance of moisture for the expansion of the tent, the tampon should be well wet with water, or what is better, glycerine and water, which makes a good antiseptic.

At the risk of being tedious I will add another item in the manufacture of these tents, which I deem not unimportant, viz., the use of flour paste made by a certain formula, instead of the mucilage of gum arabic.

The formula for the paste, was taken from a medical Journal, and I have had a gallipot of it setting on my table, and been using it for months past for all purposes. The principal advantage of it in the manufacture of sponge tents, I think, is the mineral ingredients which prevents that abominable putridity that characterizes sponge as commonly used.

White Paste which will Adhere to any Substance.—Take sugar of lead, ʒiii.; alum, ʒiij—both are dissolved in water. Take gum arabic, ʒv. and dissolve in water, ℈j. Mix in a dish 1-4 pound of wheat flour with the gum-water cold, till pasty in consistence. Put the dish on the fire and pour into it the mixture of alum and sugar of lead. Shake well, and take it off the fire when it shows signs of ebulition. Let the whole cool and the paste is made. If the paste

is too thick, add to it some gum-water, till of proper consistence.—*Journal of Applied Chemistry.*

In conclusion I will call attention to the immense advantages of sponge tents in the *exploration of the cavity of the uterus*, in cases where it is indispensable, and in the various manipulations where nothing can be effected without dilitation. An expedient which will enable us to introduce the finger fairly into the cavity of the uterus and explore it fully, cannot be too highly extolled, as we cannot, by any other means, in many cases, make a diagnosis, or take a step towards treatment of a malady, that must end fatally, unless arrested.

ART. II.—PASSIFLORA INCARNATA, A REMEDY FOR TETANUS. By D. L. PHARES, A. M., M. D., of Newtonia, Mi.

In 1838, while a student, my old friend, the late Dr. W. B. Lindsay, then of Bayou Gros Tête, La., directed my attention to this plant as an unrivalled remedy for tetanus infantum. He used it for thirty years with extraordinary success in all cases of tetanus neonatorum. While resident at Grand Gulf, Mi., he extended its uses; and, after his removal to New Orleans, he still further enlarged his ideas as to its uses, several times requesting me to prepare and furnish him the medicine. Having no acquaintance with scientific Botany, and finding the plant differ much in strength in different samples, he naturally fell into the error of supposing that the difference resulted from using five or six species. He was finally convinced, however, that he had never used but one species, and that the difference in strength was caused by difference in locality of growth, season of gathering, mode of preparing, &c.—As found on the dikes or levées around New Orleans, "it grows luxuriantly, but has no virtues at all." That grown on uplands is much better, and that gathered on "Bayou Gros Tête seems to be strongest." Last year, a few weeks before his death, he wrote, in answer to an inquiry which I had made; "I have much to say—I

am satisfied it is no narcotic. It never stupefies or overpowers the senses. A patient under its full influence may be wakened up, and he will talk to you as rationally as ever he did; leave him for a moment, and he will soon be off to the Elysian Fields again. I have tried it, my friend, in all sorts of neuralgic affections, and have usually astonished my more enlightened patients with it.—Many times I have had them to ask me what in the world it was that had such a sweet influence over them." From observing its very delightful effects, he always called the inspissated juice by the neither very classical nor scientific appellation, "somnum seraphium."

Last year was very unfavourable for making a good preparation, so that I sent him but a small quantity, which, he wrote, was too precious to use for anything but tetanus, for which he considered it a specific. Of the aqueous extract of the root, he writes: "It is a famous application for chancre. I have, by spreading it over erysipelas, driven that inflammation away in a short time. I have cured irritable piles permanently in two or three applications. I have never found its equal in new burns." Besides his experience in private practice with the passiflora, he had a fine opportunity, during the late war, of using it in a military hospital, where there were many cases of syphilis, all of which he managed so successfully as to cause much surprise. Such is a very brief sketch of Dr. L.'s experience with this remedy.

I have myself used it in syphilis, but not in a sufficient number of cases to form a decided opinion as to its value. I never saw anything else act so promptly in erysipelas. I have used it with advantage in ulcers, neuralgias, and tetanus. I have seen wonderful effects from it in relieving tetanus; but, having no record of cases by me, I could not with propriety attempt to detail cases. I will merely mention one case from memory. Some ten years ago I was called to see an old lady in a distant part of the country, who was reported to be "having fits." I found her able to be up most of the time, but, while examining her, convulsions came on, affecting mainly the trunkal muscles and drawing the head back.—I gave her instantly a dose of the passiflora. The convulsions subsided, and she has never had one since. I continued the use of

the medicine, in small doses, for a few days. I have used it treating tetanus in horses—a disease usually considered as inevitably fatal to that noble animal. It has never failed to cure the horse. Let one case suffice to illustrate. In 1851, early one morning, one of my horses was found to have trismus. A number of remedies failing, and the spasm becoming general, apparently affecting all the muscles—tetanus erectus—I abandoned him. He was down, his legs extended, and every muscle so tense as to be immovable by any force that could be safely applied. After some hours, at night, I concluded to try him with the passiflora; gathered a quantity—stems, leaves and flowers—pounded, moistened with water, expressed ten or twelve ounces, and poured down his throat through a tube introduced at the side of the mouth. He was then apparently dying, and no one believed he could survive half an hour. I saw him no more till next morning, when he was well and grazing at a distance from the place where I had left him the night before. During the late war, my son, Dr. J. H. Phares, had occasion many times to prescribe the passiflora for tetanus in horses, with one invariable result—prompt, perfect, permanent cure. He fortunately saw no case in the men.

The leaves are gathered in May, or as soon as the plant blossoms, but before forming fruit. In fact, the whole plant may be used. It must be pounded and the juice expressed through a strong cloth, into shallow glass or porcelain dishes, to dry as rapidly as possible in the shade, with free circulation of air. When dry, it is reduced to a powder by the use of mortar and pestle, bottled and closely corked. The dose of this powder is from one to four teaspoonsful, repeated pro re nata. I have made ethereal, acetous, aqueous and alcoholic preparations, and perhaps others; but the inspissated juice reduced to a powder is the best I have ever used. The size of the dose renders it somewhat objectionable. Some eight or ten years ago, I requested a manufacturing chemist of New York to prepare the concentrated active principle of the passiflora incarnata, which he promised to do; but he has never reported progress. If a concentrated solution could be obtained, I have no doubt it would supercede morphia and atropia for hypodermic medication, its action being so much more pleasant and safe. I have

never seen the least unpleasant effect from it in any dose however large, although I have given it in quite large doses. When gathered later than May, the juice can never be sufficiently inspissated to be pulverized. It then contains too much sugar and gum. For external use, the whole plant may be boiled for an hour, then thrown out, and the extract thus obtained boiled down to a proper consistence for the object in view. For this purpose, the perennial roots answer well, gathered after the first frost in autumn.

The *incarnata* may be easily distinguished from the other species of passiflora. This and the *luteo* are the only two species found in the United States north of Florida. Three other species are found in Florida; but all these, like the P. luteo, are small and bear fruit less than half an inch in diameter, while the P. incarnata is much larger, grows in the open fields, bears a fruit about the size and shape of the egg of the Muscovy duck, and has serrated trilobate leaves. From the sharp report emitted by the immature fruit when crushed, it is very generally called the May-*pop*.

The thick rind of the unripe fruit possesses very strongly the characteristic odour of the plant, and from it might perhaps be obtained a better extract, as in the case of opium from the immature poppy capsules. The ripe fruit is edible and harmless; but so are the seeds of the poppy, which are eaten by many persons with much gusto. I have never seen in any book any mention of this plant as a medicine. In 1629 it was first introduced into England as a green-house plant, and first figured and designated as the P. incarnata in Miss Lawrence's "Six Numbers of Coloured Figures of Passion Flowers," in folio, London. Several species found in the West Indies afford edible fruits, as the P. maliformis, P. quadrangularis, and P. laurifolia. The leaves of the last, we are told, are vermifuge. (Labat, Nouv. Voy.) The P. contrayerva is said to be carminative and alexipharmic (Brown, Hist. Jour.); the P. lyrifolia cooling, aperient, diuretic (Flor. Med. des Avtill.); the P. fœtida, pectoral, antispasmodic, emmenogogue (Ponpée Desportes). The P. Murucuja (the same, I think, called by others P. rubra), in syrup or decoction, is much used in Jamaica instead of syrup of poppies and laudanum. The flowers infused, or pounded and mixed immediately with wine or spirits, were thought to be "a very

efficient and easy narcotic." In the "Annals of the Lyceum of Natural History," I., (1825?) my copy, with many other valuable works, having been destroyed by fire, I write from memory, is an interesting paper of some length, by Dr. Ricord, on the P. quadrangularis, the decoction of the root of which, the writer says, is a dangerous narcotic poison.

Since the foregoing was written, I have treated, with the fluid hydro-alcoholic extract of passiflora, obtained from the dried leaves by displacement, several cases of neuralgia and one of sleepless, incessant motion and suicidal mania. With the same extract, during the current week, Dr. J. H. Phares has treated, with the most prompt and satisfactory success, a very violent and hopeless case of tetanus, with opisthotonos, trismus, and convulsions in a child two years old. Other most potent remedies, in heroic doses, having failed to produce any effect in this case, he thinks nothing but the passiflora could possibly have saved the child.

ART. III.—A CASE OF POLYPUS WITHIN THE UTERINE NECK.—Read before the Academy of Medicine in April, 1867. By Ro. W. HAXALL, M. D., Richmond, Va.

Since the last meeting of the Academy, a lady from a neighbouring County, called upon me for relief from a troublesome affection to which she had been subject, for the last four years or more.

She was quite pallid, and complained of difficulty of respiration and palpitation of the heart upon taking ordinary exercise. From the period stated above, she had observed great irregularity in what she supposed to be her monthly function; she was almost constantly *unwell* to a greater or less degree, and was not unfrequently subject to attacks of severe menorrhagia. She had been at various times under medical treatment, but in what that treatment consisted, I have no means of knowing. Her own impression is, that astringent medicines were generally used, and she is quite positive that the medicinal article last employed was some preparation of iron. She

stated that a tactile examination had been made, but that no exploration by the speculum had been resorted to. She is the mother of several children.

She was informed that it was useless any longer to employ astringent remedies, as such had been ineffectually tried for some time past; and that the only mode by which the true nature of the affection under which she laboured could be ascertained, would be by the employment of the speculum. Like a woman of sense, she at once gave her assent.

The examination was made the next day with a large cylindical speculum; and, as had been predicted, a polypus was found emerging from the os tincæ to the extent of nearly half an inch, as nearly as could be judged. It was very clear that it did not arise from either lip of the os; the anterior lip throughout its whole extent was distinctly visible, while a portion only of the posterior lip could be seen, inasmuch as the protruded portion of the polypus overlaid and concealed it from view. In order to ascertain as distinctly as possible the actual seat of this polypus, Simpson's uterine sound was introduced, and without much difficulty passed to the fundus of the uterus, a distance of about three inches, as measured by the eye. No obstruction being found within the cavity of the uterus, and it having been ascertained that the base of the polypus was not attached to either lip of the os tincæ, the inference became irrisistable that it must have its origin within the uterine neck. Whether this was a pedunculated or a sessile polypus remained to be ascertained.

Such was the condition of the patient upon the first examination. The course to be pursued was at once determined upon.

The day following, with the assistance of my friend Dr. Bolton, we proceeded with the operation.

The patient being placed upon her left side, with the aid of Sims' speculum, the perineum was pressed back as far as it could be accomplished. But what was our surprise when we discovered that the os tincæ could not be brought into view by reason of the fact, that there existed a considerable hernia of the anterior wall of the vagina. This complication was not observed upon my first examination, for the cylindical speculum which was then used, pushed

back the prolapsed wall of the vagina, and concealed it from view. Clearly then the polypus could not be reached in this mode.

The patient was then placed upon her back, the buttox being brought near the edge of the bed, and the long bill of Sims' speculum was introduced beneath the arch of the pubis. This manœuvre did not sufficiently expose the os; for while it unquestionably relieved the field of vision which was obscured by the prolapsed anterior wall of the vagina, it was yet necessary that the perineum should be sufficiently retracted to admit of any operation.

Here was a dilemma; fortunately we had with us a vaginal dilator which was introduced and pressed back upon the perineum as far as practicable. For want of another assistant, Dr. Bolton was compelled to manage both the dilator and the speculum. This brought into view the os tincæ with sufficient distinctness; but by reason of the limited space between the blades of the dilator, manipulation with the instruments necessary to remove the polypus, was rendered quite difficult.

A tenaculum was first plunged into the visible portion of the polypus with the view of dragging it as far into the vigina as possible. If the base were a pedunculated one, and the polypoid body movable, there would perhaps have remained nothing more to be done than to have separated it with the curved scissors with which I was provided, or to have removed it by torsion. If it could not be withdrawn from the uterine neck, the inference was warrantable that its attachment was by a broad base, or a sessile attachment, as the books call it.

The effort with the tenaculum was futile. The traction was quite moderate, but the polypus was so soft that it was found impossible for the instrument to retain its hold.

With a pair of polypus forceps, the protruding portion of the foreign body was now laid hold of, and as it was found impracticable further to dislodge it by traction, it was amputated with the curved scissors. Little or no hæorrhage followed this trifling operation.

The location of this polypus was certainly within the uterine neck, and as its base had not been touched, there reasonably existed an apprehension that at some future time it might reäppear. In order to prevent such an occurrence, it was determined to pass as

often as might be deemed necessary a stick of nitrate of silver within the cervix. This was done; but it appeared to me that the extent of its introduction was not sufficient; nor was this to be wondered at, for on account of the elemental structure of the polypus (a soft mucous one) and its small size, there had occurred but little dilatation of the uterine neck. I did not know, nor could I well ascertain, at what point on the left side of the cervix, the base of the polypus existed. It was therefore determined to dilate the neck of the uterus with sponge tents, to the extent that might be found necessary for a free introduction of the lunar caustic.

The application of two sponge tents proved to be sufficient for this purpose; and the little cylinder of nitrate of silver was passed with facility.

During my Professional life I have seen many cases of Leucorrhœa proceeding from chronic follicular inflammation of the mucous membrane of the cervix, and in a majority of these I have seen but partial benefit derived from a long continued use of the nitrate of silver. This substance is, I believe, recommended by the generality of authors. But if the observation of all coincide with my own, it will not retain the reputation which it once possessed. There is another remedy however of undoubted superiority, and which has been brought into notice quite recently. This is chromic acid. Its action is more penetrating than that of nitrate of silver, and a more complete disorganization of any morbid tissue results from its application. Not feeling altogether satisfied, that the nitrate of silver would effect all that was desirable in the case which I have related, only one application of the saturated solution of the acid was made; and this appears to have accomplished all that is necessary. Reparation of the cervical mucous tissue is gradually and favourably progressing under the application of a very simple dressing of raw cotton saturated with glycerine; and I doubt not the patient will return to her home in a few days from this time.

To-day, June 3d, I heard from my patient, who reports herself as quite well.

ECLECTIC DEPARTMENT.

"Floriferis ut Apes in Saltibus Omnia Limant."—Lucret.

I.—Indiscriminate Use of Alcoholic Stimulants in Disease. A Lecture Delivered at Guy's Hospital. By Samuel Wilks, M. D., Physician to, and Lecturer on Medicine at the Hospital.

In drawing your attention to the case of bronchitis and the good results which followed the discontinuance of stimulants after I had at first ordered them, let me impress upon you the importance of always seriously considering the advisability of alcoholic treatment before you have recourse to it. To my mind, the most important question in therapeutics at the present day is the value of alcohol in disease. Because this agent is made use of daily by a large part of the community as an article of diet, its administration in disease is treated too often with carelessness, and it thus forms, without a due consideration of its action, one of our commonest prescriptions. If it be said that its frequent use is an evidence of its potency, this is the more sufficient reason why its administration should be watched with the extremest care.

You know it is not decided in what manner alcohol exactly behaves in the animal economy: the proof is wanting that it is a food for the lungs, whereas its direct effect on the nervous system is evident. A want of knowledge of the precise changes which it undergoes in the system is, however, no argument against its use, since its advantages must be discovered from experience alone. If the taking a stimulant restores a flagging nervous force, and so adds fresh life to the various organs of the body, a benefit may have been received; and thus most of us are brought up in the habit of taking our glass of wine, and feel ourselves refreshed. Since the active agency in many of our stimulating drinks is alcohol, many persons have recourse to spirits in order the better to obtain its influence, and thus brandy may become with them a regular article of diet: the necessity for some stimulus being assumed, if malt-liquor or wine be supposed to disagree, some brandy-and-water is drunk instead.

I am not going to enter upon the much-vexed question as to the necessity for the daily use of wine or spirit; but I will say that the usual test for the advantages of its use is one which I conceive to be in most cases utterly valueless. Alcohol, remember, although an excitant, is a sedative to the nervous system— is, in fact, an anæsthetic. A drunken man may be injured in such a way as to have all his teeth knocked out in a brawl, yet apparently not perceive the injury, and be utterly unconscious of the occurrence when he has returned to soberness. The argument, therefore, that a man feels better after his glass or two of grog would be equally applicable to the case of the Turk who

feels better for his opium. His feeling better simply means that he has got rid of his unpleasant sensations, whether these be moral or physical; he "drowns his troubles in the bowl." If a man engaged in the practice of his profession, mercantile business, or even pleasure, such as boating, cricketing, or shooting, intends to assert that he can pursue these respective objects with more success after he has taken a stimulant, then he may have an argument in favour of its use. If, however, it be admitted that during the active pursuits of the day a stimulation to the nervous system is injurious, but that after the fatigues are over the body must be recruited, and that a proportion of alcohol is beneficial, I have nothing to say against it, should experience speak in its favour. I repeat, however, that in the majority of instances where a man's reason for taking his wine or spirits is of no better kind than that he feels better for it, the reason is utterly valueless; indeed, it may generally be assumed that whilst his feelings are benumbed his organization is being injured. The argument is no better in favour of the use of wine or other stimulant in disease—as, for example, that it must do good, since the patient craves for it. The question of the advantages attending the daily use of beer, wine, or spirits, although a difficult one to solve, is one which you cannot evade considering, since the health and welfare of families may depend upon your judicious decision. You may recommend wine with advantage to members of certain families having peculiar temperaments, while should you advise it for others you may unwittingly be sowing the seed of ruin of mind, body, and estate.

The subject of the different temperaments of your patients and their mode of life is one which is well worth your study; but the matter I wish now to strongly enforce upon you is that you are as thoroughly to consider the propriety of the administration of alcohol as you would any drug in the Pharmacopœia. Endeavour, if you can, to erase from your minds that it is a proven fact that alcohol is a tonic or a necessary part of every one's beverage. This is assumed by a large mass of people; and the meaning of the question which your patient puts to you when he says "What shall I drink?" is not "Shall I take a stimulant or leave it alone?" but "Shall I drink beer, wine, or spirits?" He often confesses that he is in a great difficulty; he finds none of them agree with him; but that he must take "something" appears as necessary as eating his daily bread; the alternative never having formed part of his calculation. I say it is assumed that a strength-giving property lies in these drinks—that just in proportion to a man's feeling of weakness, so will he require one of them: in ordinary health he may only want his beer; but if ill, his wine; and if very ill, his spirits. Now this popular opinion is shared in, I am sorry to say, by many in the profession: if the patient is weak he wants "support," this term carrying too frequently with it the necessary idea of wine or spirits. I should be sorry to say that the doctor panders to the public taste, since he is too often already in accord with it; but the consequence of such agreement between patient and medical man resolves itself into this, that an extra stimulant is prescribed. You might ask to what

complaints do I refer when I speak of this too common advice; but I need only repeat the word "patient," for it matters little what is the nature of the disease, since the reasons for the treatment are applicable to all complaints, and are founded on this simple proposition: all persons who are ill are weak; they have lost strength; they require it to be restored; alcohol is a supporter and a tonic, therefore alcohol is a remedy for all diseases. This is no parody, for I have heard the argument set forth in some such words; and practically it is adopted by many, for I constantly hear medical men say they give brandy to all their patients, for they always find them "low." Brandy indeed becomes with some as much a universal remedy as revalenta, chlorodyne, Morison's pills, or any other quack medicine. Moreover, it is a medicine of which the patients approve, assuming as they also do its supporting and strength-giving powers. You therefore cannot do better, if you fear no compunctions in converting your profession into a mere trade, to say to all your patients, after feeling their pulse, that they are very low—that you are sure they do not take enough; and order them several glasses of wine daily. Should they be exceedingly ill with some desperate organic complaint, then you must turn your remarks to the friends, and speak of the necessity of supporting the patient by giving him as much brandy as can be poured down his throat. By this method you are sure to give "satisfaction;" for should the patient die without such treatment, you may have the credit of letting him slip "through your fingers;" whilst, if he die with it, you have done your best. If you kill a dozen patients with brandy, you need have no fear—"you have done your best." This, I say, would be a very comfortable and lucrative mode of practice.

It may very fairly be asked, if alcohol be so potent a remedy that it can supersede all drugs in so many several cases of disease, is not this a reason why brandy-treatment should be adopted with some consideration? The want of caution in its use is owing, no doubt, to its entering so frequently into the daily diet; and thus alcohol is not reckoned amongst the same class of agents as that of medicines. On the bed-cards in this hospital there is one column for the medicines, and another for the diet. Before filling up the one, we discuss the benefits of giving our patients a few drops of henbane or ether; and in the other column we often write down any number of ounces of brandy with very little thought of its effect. If alcohol were transferred to the medicine side of the card, we should be more likely to discuss its value in any given case in the same manner as we do the various drugs in the Pharmacopœia.

It would require a whole course of lectures to dwell upon the beneficial or baneful effects of alcohol in all forms of disease; and, therefore, I will state, as a result of my own experience, that, like other drugs, it may be beneficial, useless, or harmful. I may remind you of what you yourselves have witnessed—that fevers will do well without this remedy. So wedded, however, are some to the idea of the absolute necessity of stimulants, that they have expressed almost incredulity when they have heard it stated that fevers will terminate favourably

without them. Of course stimulants are often needed; but young persons with typhus and typhoid do far better, I believe, without them.—That they make good recoveries on simple milk diet is a fact which my hospital cases prove, and which no arguments can gainsay; and, on the other hand, I have seen a marked improvement take place in some cases where a stimulus has been left off. It is also a fact that in bronchitis I have repeatedly seen improvement after stimulants have been omitted; and, as regards heart-disease, I am convinced that the amount of mischief done by stimulants is immense. In the case of fevers and bronchitis, the weak pulse is often but an indication of extreme capillary congestion, and a stimulus to the heart only aggravates the evil; and in the case of a diseased and weak heart, where repose is indicated, a constant stimulation by alcohol adds immensely to its trouble.

It causes me daily surprise to observe how the effects of stimulation are overlooked. Often have I been called to see a patient apparently dying, sometimes of a nervous disorder, at another time of a liver complaint, and at another of heart-disease. He is lying in bed, where he (or she) has been for some time, and kept alive (as it is said) by brandy; the breath is abominably fetid; the heart's action is so rapid that it is impossible to say whether the organ is diseased or not; the patient refuses food, or if this be taken, it is rejected, and so he is plied with brandy to keep him alive; the body is, in fact, saturated with spirits, or its elements. My first remark on seeing such a case is, that a man cannot live on alcohol; he must take some food or he will die. The correctness of such common-sense remarks is admitted, but qualified with the statement that no solids can be taken, and that if stimulants be omitted it is feared the patient will sink. It is assumed that the constant administration of brandy is necessary for the temporary maintenance of life, and the idea never seems to have been conceived that the stimulation of the heart causes the weak, fluttering pulse, and the stimulation of the stomach a subacute gastritis. Do you ask me what method I adopt? The simplest possible. I withdraw every drop of the stimulant, and in a few hours the irritated stomach is partly restored to its normal condition, the nervous excitement abates, the patient takes a little food, and begins to mend. Do you ask, again, whether I do not fear any frightful result from the sudden withdrawal of the stimulus? I say, not the least; I have no fear of the consequences. Not of delirium tremens? Not in the least. This is a disease not induced by the withdrawal of stimulants, but, on the contrary, is produced by a recent debauch. For the production of delirium tremens the patient must have been such a habitual tippler as to have weakened his brain, and must then have had an overdose of the stimulant to set up the disease. There are no facts to show that the withdrawal of the accustomed drink is attended with any evil results, although I know that an imaginary fear of this kind leads to an erroneous and vicious method of treatment—the plying the patient with a stimulant during the violence of the attack, the effect of which is to prevent or prolong the cure. Rest and repose, with the avoidance of

stimulation, is the treatment which the patient requires. So success of digitalis may be mentioned in corroboration of this view. I repeat that there are no facts to show that delirium tremens is produced by the withdrawal of stimulants, whilst it is a fact, as I could illustrate by many cases, that nothing but good results from its absolute discontinuance in the desperate cases to which I have alluded.

That many cases of disease of various kinds would do far better without stimulants I am perfectly confident. But lately I have seen the case of a gentleman, about sixty years of age, who passed through a most severe attack of pneumonia without the use of stimulants. He had been a tolerably free liver, and would not have been called a good subject; but having before me the case of another gentleman of the same age, who had just died of pneumonia, and who had taken a large quantity of brandy, I readily acquiesced in the patient's own view, that none should be given. It is very remarkable what extremes we have reached, and on how slight a scientific basis is founded the treatment of pneumonia. Not many years ago the antiphlogistic method was adopted, including bleeding, antimony, calomel, &c.; then came the "let alone" method; and now we have the brandy treatment. What the need of this can be, with Professor Hughes Bennett's statistics before us, I do not comprehend. My own opinion is (but of course this is only an opinion,) that in any given number of cases a larger majority would recover under the old antiphlogistic treatment than by the more modern method by brandy. As regards heart-disease, the utmost discrimination is required in the use of stimulants. There are cases where an undoubted benefit is produced by them; but there are others, and these I have seen repeatedly, where alcohol has induced palpitation, fluttering, great distress, and constant sleepless nights, but where, on the other hand, the withdrawal of the spirit, and the substitution of a dose of digitalis or henbane, has been of the most essential service. The administration of a stimulus, in the attempt to overcome disease, in lieu of good and well-tried remedies, evinces the very worst form of medical scepticism with which I am acquainted.

It is not only in these severe cases of disease, but in lesser troubles, that your recommendation of stimulants may do incalculable mischief. You visit, for example, an ailing lady, and she details to you a number of troubles of a nervous and dyspeptic character. She is sitting indoors all day, taking no exercise, living well, and consequently drifting into a weak and flabby condition. You place your hand on her pulse, and, finding it feeble, condole with her on her state of health, assure her that she does not live well enough, and order her a few extra glasses of wine or a little brandy.* You find that she grows no better for the

* The word "little," it must be remembered, has long ceased to maintain its original signification in reference to eating, drinking, and physicing. It would be extremely vulgar were we to be asked at our dinner-tables to take otherwise than a "little" more; and the doctor would not be forgiven by his patient were he, in detailing the ingredients of his prescription, to state that he had administered the regular dose, but that he had given only a "little" of this or that. When therefore a patient is ordered a "little" brandy, the adjective in no way qualifies the amount.

advice; but perhaps you never reflect that you have been adding fuel to the fire. Knowing not what to do in the way of treatment, you order her out of town, and she immediately begins to improve. She goes to Brighton, rides on horseback or walks miles a day on the Parade, regains her appetite, craves less for stimulants, and her health is restored. If, on the contrary, you fail to remove her from her home, she goes on from bad to worse; she takes to her bed, eats less food, drinks more wine and brandy, until, having become one mass of fatty degeneration, life can hold no longer, and death ends the scene. This lady has been killed with kindness. This is no imaginary case; my mind's eye carrying me to the bedside of more than one such instance. Do not then assume that alcohol is equivalent to a tonic, and that it must be necessarily administered because your patient is weak. It may be that that very weakness is due to the long-continued pernicious effects of this same stimulant; indeed, as you have often heard me say in the out-patient room, if a man comes into our presence with a tottering gait, bloated face, and his nervous energy all gone, you may be quite sure that he has been taking "strengthening" things all his life.

I will say no more on the subject, as I do not wish to speak condemnatory of alcohol as a remedy, since it is one of the most powerful agents we possess to rouse the dormant nervous power. Moreover, I do not wish to speak too dogmatically of its ill-effects, fully aware that there are many holding very distinguished positions in the Profession whose opinions are not in accordance with those I have expressed. Were it not for this reason, I should have used still stronger language than I have done; for even firm convictions must be restrained, when we know what an amount of contrary opinion can be arrayed against us. It is, nevertheless, the duty of every one to express his own conviction when that is based on experience, and thus I shall ever feel bound to withstand the indiscriminate use of stimulants in disease.

Whatever may be thought of the remarks just made, there is one thing which I must insist upon—that is, when treating any malady, and the administration of alcohol is suggested to your mind, that you give the same grave consideration to its recommendation as you would to any other potent drug in the Pharmacopœia; not to sit down and give all your serious thoughts to the question of whether a grain of this or a grain of that drug should be ordered, perhaps twenty or thirty drops of ether, and then at haphazard order any loose number of ounces of brandy. You observe that I say nothing against the potency of alcohol in several states of disease; but I do speak strongly against its indiscriminate use, without due consideration of its need or of its results. My arguments would equally apply did I find that opium or any other drug were indiscriminately used as a universal medicine. I should protest against the practice, whilst still possessing great faith in the virtue of the drug. If I can influence you to place alcohol in your list of drugs, so that you may administer it with the same caution as you do the several articles in the Pharmacopœia, then the object of these remarks will be fully answered.—*London Lancet.*

II.—MEDICAL OBSERVATIONS IN CHINA: By DR. WILEY. Delivered before the Cincinnati Academy of Medicine.

I shall not be able to communicate much medical knowledge to you this evening, as I am called upon to speak of a country and system of medicine very far in arrears of what has been attained in this comparatively new country. I shall call you back to what medicine was some centuries ago, rather than to help you to any useful knowledge in your studies. My connection in China extended over five years, from 1849 to 1854, in the position of a physician to a mission station at the city of Fou Chow, in one of the most populous provinces, numbering about 18,000,000, in a territory not greater than Ohio. On a fair estimate there were within the walls of the city 900,000 people, and including the suburbs, fully 1,000,000. In addition to my care of the missionaries and their families, it was my duty to make use of the practice of medicine to promote the missionary work among the natives, in all cases to be used gratuitously. I met out-door cases three times a week, but after two or three years I established a private hospital that would accommodate fifteen or twenty patients. I came in contact with Chinese physicians, and would immediately retire on one making his appearance beside a patient.

Origin of Medical Practice.—The practice of medicine originated in the family, where every other good institution took its rise; the father was the first physician, from whom the practice passed to the priest, whose influence in the household came next to the father; and from the priesthood it grew to a separate Profession. In China all three customs prevail, but blended together, each being present and exercising his art, his ceremony and his authority. The doctor, priest and father, all are engaged with the patient at the same time—the treatment consisting largely in the use of charms, figures, cut out of stone or metal, or bones taken from sharks—greater reliance being placed on these, both for preventing and curing diseases. They interfere with the treatment of the physician, and are injurious to the patient—a large part of the ceremonies being very noisy, resulting from the theory that diseases are caused by the presence of evil spirits; at least this is the theory of the priests, which is adopted by the people, and the physicians do not interfere in the matter. The patient is often taken out of bed, carried around the house, with great noises, made by the firing of whole packs of their Chinese crackers, and the ringing of gongs about their ears.

Absence of Medical Science.—It is only by a license that we can speak of their practice as being a Medical Profession; it is simply a trade. Each physician practices on his own knowledge, and has his own students, keeps his own facts and discoveries to himself, often not revealing the latter even to his own students. He is his own druggist, and prepares his own medicines for administration.

The business is divided up into many specialties, physicians choosing their certain diseases for treatment, and leaving others to those who prefer them. The practice of a physician is not regarded with as much honour as in Western Countries. I think I may say he is always a gentleman, always intelligent, in the sense of Chinese intelligence, polite and courteous; and yet he does not rank among the literary classes, or as highly as official circles. His position is more that of a merchant.

Medicine in China is not a science; it is empiricism, with no accurate reliable facts to rest upon. It has no anatomy, physiology, or pathology. It consists of a vast accumulation of facts, remembered or recorded in their books. Its materia-medica is built up from long observation. They have no anatomy, for the reason that the dissection of the human body is absolutely forbidden. The physician would undoubtedly be put to death if he attempted to dissect the human subject. They therefore can have no more knowledge on this subject than such as is derived from outward observation, and such knowledge as is derived from the process of butchering animals for the table. They are acquainted with the principal organs of the body and the right location, and speak of their diseases, but know nothing of their minute action.

Chinese Theory of Life.—They are ignorant of physiology, and know little of the great vital functions of the body. Yet they have a theory of life. They are not acquainted with the circulation of the blood. They know the blood moves, but as to its great circuit around the body they are entirely ignorant of.

As a consequence, their theory of pulse is a striking novelty. Wherever in the system they find a pulse they regard it as an independent manifestation, having no connection with any other pulsation. Finding a pulse in the lower extremities, they do not infer that it has any connection with the heart. In their examinations they find as many as two hundred different pulses, which are described in their books, each having a distinct indication as to the condition of the different parts of the body. To the foreign physician it looks supremely ludicrous to see them examining the pulse, first in the wrist, then the neck, the breast, the leg, the abdomen, etc., before a correct diagnosis is ventured upon.

Their theory of life runs through all their treatment of disease and their idea of death. It may be called the theory of heat and cold. The living body is a play between warmth and cold. Life is warmth; its great antagonist is cold, and it is regarded as much a positive body as heat. The phenomena of life consists of the constant antagonism between these two forces. The heat of the body is kept up by food; and the great object of food is not so much for nourishment, in their view, as for the purpose of generating heat; and this it does do, according to our knowledge of its chemical effects, so that they are not far wrong. The introduction of food into the stomach supplies fuel for heating the system; it is appropriated by the process of digestion;

passes through various channels into the lungs, where by the fanning operation of that organ its excessive heat is cooled. It is diffused by the lungs—not by the heart—throughout the system; and while so diffused life is kept up; but if cold is allowed to be introduced, which is regarded as a positive substance, it will diffuse itself in the same manner as heat, and a battle ensues. As the battle goes on, heat sometimes gains the ascendency, and the patient is thrown into a fever: cold sometimes gains the ascendency, and the patient is thrown into a chill. When heat gains a permanent ascendency the patient is restored; but when cold gains a permanent ascendency, death ensues.

They know nothing of pathology, and in consequence the great question in their practice is whether the patient must be submitted to the hot treatment or the cold treatment. Attention is directed altogether to the theoretic battle that is going on in the system; and after all I don't know but it turns out pretty well in the end. When the physician finds a patient burning up with a fever, he goes to work to reduce and deplete the system; or if he finds him shaking with a chill, though his theory be wrong, his practice is right, for he goes to work to increase his warmth by hot blankets and stimulants. Many a patient, no doubt, is saved, on a false theory there, as they are, we must admit, in this country.

Evil Spirits—Influence of the Moon.—They attribute their disease and death to the influence of poisons in the air, and to wicked spirits; in this latter respect, however, their ideas are different from those expressed in the Scriptures, where sickness is said to have been caused by wicked spirits. It is not lunacy or insanity that they mean. Insanity is a distinct disease with them, as with us, and not the result of demoniacal influence; nor is epilepsy. And remarkable as it may seem, they use the same word, lunacy, to indicate insanity, attributing the cause to the influence of the moon. And you could, under no consideration, hire a Chinaman to sleep in the moonlight at night.

Multiplicity of Remedies.—The great strength of Chinese medicine lies in the multitude of their remedies. Their materia-medica is as large as ours. It consists of a vast accumulation of materials that, age after age, empirics have said were good for this and good for that. Of such facts their books consists. They are characterized by a vast predominance of vegetable matters. As a science they know nothing of botany; but as far as acquaintance with the characteristics of the plants goes, their growth, and properties, when used as medicines, they are exceedingly well versed. I might say with safety, that every plant that grows in China has been studied with a view to its medical qualities, and no doubt they are in possession of valuable facts that will in time be made useful in other countries; and I might say also, that they are about as successful in the treatment of diseases as physicians in other countries.

Next to vegetable remedies are animal products in their practice. Some of them are exceedingly disgusting in their application to the

human system. The more outlandish the animal the better is the medicine. The medicine taken from a shark, for instance, is considered more powerful than that obtained from a better behaved fish; and the blood of a lion or tiger is more powerful as a medicine than the blood of less ferocious animals. The blood of a tiger would be given to a man who needed a little more of the tiger in his composition; and the blood of a lion would be given to one who needed a general rousing up of his powers.

A class of medicines which we have not touched as yet, is the poisonous substances of animals and insects. They do not know how to extract the poisons, but they cut off the stinging portions of insects, scorpions, and such like, which are prized very highly, and apply them in various ways. Some of them prove very powerful and prompt in their action.

They do not deal very extensively in mineral substances, arguing that as but few of the mineral substances are embraced in the human organization, it would not be proper to infuse such substances into the system. Mercury and iron are about the only minerals they use, which they employ in various forms, mercury extensively, in something like our blue pill, and something resembling calomel.

Peculiarities of their Practice.—The physician approaches the sick-room with courtesy and politeness, and having ascertained the nature of the disease of his patient, proceeds to prepare his prescription. Their prescriptions, generally are vast compounds; they go on supposition, very common with other practitioners, that it is best to give several remedies together, so that one or another of them will hit the case. Sometimes they compound as many as fifty to eighty ingredients, and stew them all together and then administer. They hardly ever prescribe less than fifteen or twenty simple medicines. The physician is not so much a prescriber as a seller of medicines. He tells his customers what he thinks is best for them, or their friends, but it is very frequently the case that they make the selection. For instance, he may make up a prescription of ten or thirty remedies to be compounded, when the question will arise, how much is this to cost? The physician makes as low an estimate as possible, and replies. The patient, or friend, may think it is too high, that it can't be afforded; and one article and another is thrown out, to reduce the cost—often the articles most valuable to the patient. In some cases they cannot agree on a prescription, or its price, and the patient deliberately gives himself to die rather than pay the price demanded.

Responsibility of the Physician.—The physician is greatly responsible for his patients. If he fails to cure, the patient or his friend may prosecute him at once. If through any inattention or mistake he has caused the death of a person, he must pay the penalty—which penalty generally means the support of the family. If through a fatal medical blunder this result happens, he is forever afterwards prohibited from practicing his Profession—a regulation that might, perhaps, prove

advantageous in other countries. Visits are never charged; they simply charge for the medicine used, and it is always on trust until the patient gets better—conditions not very favorable for large incomes and great wealth.

Novel Cupping Process.—They employ cupping to a large extent, to relieve local inflammations, etc., but they employ a different process from what we do.

They prepare the place on the skin by scarification, and then a man or woman who makes a business of it applies the mouth and sucks away the blood. Their power of suction, by constant practice, becomes tremendous; and it is sometimes very disgusting, as they also relieve old sores and abscesses in the same way.

Horror of Water.—The Chinese are exceedingly afraid of water. They do not drink it sick or well, using it only in a limited way as medicine, prescribed in tablespoonful doses. Their universal drink is tea, made just as they want it. On one occasion a little boy fell in a fainting fit, and we resorted to the American method of dashing water in his face. The result was almost a riot among the Chinaman present, who cried out against it with as much horror as if we were murdering the boy. Fortunately for us, he recovered so quickly as to astonish them and save us from harm.

Wonderful Secret Medicine.—A man who makes a medical discovery there, keeps it as a secret, making all he can out of it, instead of communicating it to his brother physicians, as is done with us. There is a remedy known there as the red pill, or *sou shouchin*. It is manufactured by a single family, and is sold in a restricted way among the physicians. It is a powerful remedy, and is resorted to in the low diseases that prevail so extensively in that country. Its prominent indication is its prompt and powerful sudorific influence. I had no means of analyzing it, and perhaps it would have been useless to attempt any discovery, on account of our limited knowledge of their materia-medica. It was slightly narcotic, but powerfully sudorific. I never knew of anything that would run so rapidly through the system, and start perspiration so instantaneously. Some day we may have the benefit of it.

Infallible Cure for Hydrophobia.—Whatever we may say of their ignorance and want of scientific information, they can do what we cannot—they can cure hydrophobia. The remedy is confined to a class, or a clique, of physicians, who make a monopoly of curing it. While the physician comes in and prescribes this almost a specific, his superstition carefully prohibits the presentation of anything containing hemp, under the notion that the sight of it will neutralize his medicine. We may laugh at this, but we cannot laugh at the fact of his cure, for it is more than we can do with our knowledge.

Skin and Eye Disease.—The diseases of China are pretty much the

same as ours, with the exception that inflammatory diseases are rarer. Cutaneous diseases are more common. Almost every Chinaman has something wrong in his skin, which arises, no doubt, from every one of them being a dirty scamp. They eat, live and die in filth.

They have a great amount of eye diseases, also. Almost every fifth man one meets, he will find something the matter with his eyes; and every fiftieth man looses his eyesight nearly altogether. They attribute it to two things—

Excessive Shaving, and the use of rice diet. The diet among the poorer people is almost exclusively rice, with the addition occasionally of a little salt fish. I think they are right in reference to this system of shaving—taking off all the hair of the head except the little cue on the crown. In addition to this they shave all over, nearly, the forehead, nose, eyes, up into the nostrils, in the ears—they make a complete shave of it, and do it frequently, keeping the skin well polished by the operation. This can not be otherwise than injurious; even the shaving of the upper lip is, no doubt, injurious. I would like to have my beard grow, stop shaving altogether, but custom seems to forbid it, in my case, at least.

Origin of the Cholera.—They claim the honour of instituting the cholera. They have a history of it, something to this effect: That in the last year of the Emperor Tow Kang, 1826, in the city of Song-Kiang, there was observed a red vapour rising above and hanging over the whole sea. It was perfectly calm, and the cloud hung there for three or four days. The people became greatly alarmed, resorted to their charms and other methods of warding off evil, such as the burning of great quantities of fire crackers and the ringing of gongs. Finally an eastern wind came up and carried the vapour over the city. Instantly it was submerged with cholera, and the cloud passed off northward into Tartary. The symptoms of the disease, as described in their books, are the same as those of cholera here. The Chinese are close observers, and I have the utmost confidence in what they put down in their books. From Tartary they trace the cholera into Siberia, thence into Russia, and from there into France, reaching Europe in 1831 or 1832, which agrees with our knowledge of its advent in the Western World.

I was surprised, the other day, at seeing in one of the city papers a recipe for the cure of the cholera closely resembling the remedy used by the Chinese. It was to fold a napkin into a hard roller and press it against the anus tightly, to prevent the dischages. The Chinese pursue the same method, but do the work more effectually. They will admit of no rice water discharges. They give some medicines, and apply the moxa along the spine. They report themselves very successful—as some of our physicians are in the habit of doing. But I would seriously debate the question between their cure of cholera and death before submitting to their treatment.

Ignorance of Surgery.—Surgery, as a science, does not exist in

China. The physicians some times very clumsily set a fracture or reduce a dislocation. They are perfectly astounded at seeing a foreign physician apply the knife. Nothing could induce them to cut off a man's leg. I once met the case of a young man with a dislocated arm, who was suffering severely. I asked if he had not called a physician to put it in place. "Yes," he said, "one had tried to draw it in, but could not succeed, and he had been poulticing it for three months, hoping the poultice would draw sufficiently to get it right." The poultice, I learned, was a live chicken pounded to death and applied to the arm.

Ignorance of Obstetrics.—Obstetrics is altogether in the hands of mid-wives who know nothing of the great principles of childbirth. The physician is never called in, not even in critical cases unless disease sets in. If a false presentation happens, or anything else goes wrong, the ignorant woman knows not how to remedy it, and the woman dies. The wife of one of my servants had suffered three days in labour, when the husband asked me to see her. From what the patient said, I was confident it was a case of false presentation, and could be remedied in a few moments, but it was contrary to Chinese custom for a male physician to have anything to do in such cases, and no arguments or inducements could prevail on the husband or wife to permit me to save the woman, and she died.

Where such ignorance and prejudice prevail, it is fortunate that the labour of Chinese women is not so severe as among more civilised nations. It is a very common thing for females to pursue their regular work, without the intermission of a day, in giving birth to their children.

Conclusion of the Whole Matter.—I would not have you go away with the idea that the practice of medicine in China is all superstition and folly. Physicians in that country, under the providence of God, have been a great blessing to the people. Four hundred millions of people depend upon them for relief, and it can hardly be denied that under their treatment they get well about as often as patients do under our treatment. They have done a vast amount of good in relieving the suffering of the sick and afflicted.

At the close of the lecture, on motion of Dr. Mussey, a vote of thanks was given the lecturer, for his interesting entertainment.—*Cincinnati Lancet and Observer.*

III—A CASE OF OVARIOTOMY. Reported by GEO. SEYMOUR, M. D., of Pulaski, N. Y.

Miss A. B., æt. 23 years. In the Spring of 1860 this patient then 17 years of age, first noticed a tumour in left iliac region, which grew rapidly, and in the Fall of that year she was tapped, by Drs. Kinney

and Clark, at which time eleven pounds of albuminous fluid were drawn off. In the spring of 1861 was again tapped and thirteen pounds of fluid, more inspissated than before, were drawn off. Health at this time feeble. From this time the tumour ceased to grow for about three years, and the health of patient improved, after which it again commenced growing rapidly, and in the Spring of 1866 was tapped by Dr. J. N. Lyman, of Mannsville, N. Y., who, with much difficulty, obtained about eight pounds of serous and gelatinous fluid. After this, abdomen increased rapidly in size, causing great difficulty in breathing, and rendering it necessary to perform the operation again in August, 1866, when about fifteen pounds of semi-fluid matter, less inspissated than last previously drawn, were removed. Seven weeks from this the condition of patient again demanded an operation, and Dr. F. S. Law, of Pulaski, N. Y., being in consultation with Dr. Lyman, tapped her and drew off twenty pounds of fluid, serous and albuminous in character. At this time an enlargement was noticed in left hypochondriac region, extending over across epigastric region, which had not been noticed before. Whether this enlargement was a part of main tumour was not altogether certain, as it became prominent upon evacuating the main tumour. It partially subsided in the course of twenty-four hours after tapping.

Oct. 11.—Abdomen again filling up rapidly and patient very much exhausted and emaciated; pulse feeble; respiration difficult. The consent of patient and friends being at this time obtained, it was decided by Drs. Law, Lyman, and Kinney that ovariotomy should at once be performed. Accordingly, on the 13th, Drs. Law and Lyman, assisted by Drs. Kinney, Bulkley and Seymour, proceeded to remove the tumour. The bowels having been previously evacuated by means of injections, and the temperature of the room brought to about 70 deg. F., the operation was commenced by tapping and drawing off eighteen pounds of serous and albuminous fluid. Chloroform was then administered by Dr. Seymour, patient coming kindly under its influence in about ten minutes. Dr. Lay then made an incision along the median line and to one side of umbilicus, from two and a half inches above umbilicus to within an inch of the pubes. Found quite a quantity of serous fluid in abdominal cavity, tumour filling whole cavity and pressing heavily up against diaphragm, especially in left hypochondriac region, where there were some adhesions. Tumour much constricted about two inches below umbilicus. The portion above had not been evacuated by tapping, and the cause of enlargement in left hypochondriac region, previously spoken of, was now fully explained. In the right lumbar region an opening into the tumour was noticed about the size of a crow's quill, through which fluid escaped when pressure was made upon the tumour, which accounts for the fluid in the abdominal cavity. It now became necessary to evacuate the tumour in order to allow it to pass through the incision. An incision was made into it, and the cysts broken down with the hand. It proved to be multilocular, and the cysts filled with albuminous, gelatinous and serous matter, which was removed with the sponge, allowing as little as possible to escape into

abdominal cavity. Pedicle about two inches in length, three in width, and from one-half to three-fourths of an inch in thickness. The mass was now drawn out and a strong silk ligature applied about the centre of the pedicle, which was cut off with a red-hot iron for the purpose of preventing hæmorrhage. The abdomen was then carefully sponged out and the edges of the wound brought together and held by means of steel needles (passed deep through the peritoneum) and adhesive strips. Left ligature on the pedicle, which was brought close in contact with abdominal wall at lower end of incision, and held there by means of a small piece of wood placed across the abdomen, to which the ligature of the pedicle was attached. Patient kept fully under influence of chloroform about twenty minutes. While anæsthetic influence was passing off, gave her tinct. opii., dr. j. and in about twenty minutes opium suppository, gr. vi. Operation completed about four P. M. At nine P. M. same day, found patient comfortable and entirely free from pain. Ordered suppository every four hours; took a little milk.

Oct. 14th, 9 A. M. Looks bright and cheerful, and says "she is bound to get well;" has had some nausea and vomited twice; tongue a little dry; pulse 120 and stronger; says she has passed the best night in three months; unable to pass urine, and some pain in region of bladder; introduced catheter and drew off eight ounces high coloured urine, which gave relief. Ordered suppositories continued and beef tea every four hours.

From 14th to 17th remained much the same.

17th. Removed two of the pins and a part of silk sutures. Union had taken place along the whole length of the incision, save at the lower end, where ligature came out; pulse 120 and more full; tongue covered with a brown coating; no movement of bowels since operation.

19th. Pulse 120; very sick at stomach; continued suppositories, and ordered potass. chloras., gr. ij., in solution every three hours.

20th. Looks badly; pulse 120, somewhat feeble; nausea continues; bowels somewhat tympanitic and in considerable pain; continued suppositories and chlorate potassa, and ordered hydg. chl. nit. gr. jj., pulv. opii. gr. ss., every six hours. Removed remaining sutures.

21st. Symptoms much as yesterday; ordered seidlitz powder, to be followed by enema of castile-soap and water in six hours. Calomel discontinued.

22d. Pulse 120 and stronger; tongue more moist and improved; tympanitis entirely subsided; nausea much less; looks bright and feels pretty well. Removed remaining pins.

Nov. 1st. Up to this date have drawn off urine twice each day with catheter; to-day patient has passed it voluntarily; is doing well.

Nov. 7th. Ligature came away; patient able to sit up most of the time.

Nov. 15th. Goes about the house and feels well.

The weight of fluid drawn from tumour by trochar before incision into abdomen was eighteen pounds; weight of fluid taken from cysts after incision, twenty pounds six ounces; weight of cysts after evacua-

tion, eight pounds four ounces; making, in all, the weight of tumour to have been forty-six pounds ten ounces previous to operation.

The interesting points in this case are these viz.:

First. That after the second tapping the tumour ceased to grow, and the patient enjoyed good health for about three years.

Second. The enlargement in left hypochondriac region and the constriction below umbilicus, rendering diagnosis difficult.

Third. The large quantity of fluid in abdominal cavity, which had evidently escaped from the tumour through the opening noticed in right lumbar region. Query: Was the opening into the tumour made by first or second tapping and pushed over to right side by growth of tumour? or was it the result of ulceration, or rapture of the cyst?

Fourth. The very feeble and debilitated condition of the patient, almost forbidding the operation, and the immediate relief following it.

Fifth. Although the incision was full eight inches long, no peritoneal inflammation ensued, and union "by first intention" took place along its whole length.

Sixth. The pedicle was not left outside the abdomen, but drawn in close apposition to the inner wall of the abdominal cavity, and held there by means of a ligature tied over small pieces of wood resting across the abdomen, so that the pus and slough from stump of pedicle came out by side of ligature instead of escaping into abdominal cavity.—*New York Medical Journal.*

IV—On some of the uses of Bromide of Potassium. By C. L. Hubbell, M. D., of Troy, N. Y.

Among the remedies which have within the past few years been brought to the notice of the medical Profession, there is scarcely one which, in my hands, has so seldom disappointed me, and so uniformly been of service in those diseases to which it is applicable, as bromide of potassium. For a long time it was but little used in medicine, and chemists and photographers chiefly consumed the small amount produced. Its use in medicine was confined mainly to the treatment of scrofula and analogous diseases, for which iodine and its salt—iodide of potassium—were used, and with the exception of some of the later editions of the U. S. Dispensatory, no mention is made of its remedial powers, except in scrofula, bronchocele and enlarged spleen. About the year 1850, the Medical Department of the U. S. Army issued to each general and post hospital one ounce of "brominium, with printed directions for preparing and administering Bibron's antidote to the poison of serpents." In 1854, Thielmann, a Russian physician, recommended it as an excellent anaphrodisiac remedy in satyriasis, in the frequent and painful erections during gonorrhœa, in spermatorrhœa, and in nymphomania. In 1860, Sir C. Locock, in the London *Medical Times and Gazette*, recommended the bromide as a remedy having considerable influence in those epileptiform affections

having their origin in ovarian irritation, and in 1862, Dr. Wilks, of Guy's Hospital, in some clinical remarks, illustrated by cases, speaks highly though cautiously of the new remedy as one of decided value in the treatment of epilepsy occurring both in males and females, and states that he continues to use it in all new cases which come before him, believing it to be wise to adopt some such remedy in the first instance. In 1862, Dr. A. Garrod, in the London *Medical Times and Gazette*, after about nine years' extensive trial of the medicine, speaking of the comparative results with the iodide of potassium in certain syphilitic eruptions, thus sums up the result of his observations:—

I. When pure (free from iodide of potassium) it did not give rise to any of the symptoms to which the name of iodism has been applied.

II. It produces no irritation of the mucous membrane of the nose and fauces—no coryza.

III. Some patients experience a peculiar sensation of dryness of the throat and neighboring parts.

IV. When given in large medicinal doses, sleepiness or drowsiness and dull headache were occasionally noticed.

V. When administered in very large amounts, some loss of power was noticed in the lower extremities, which passed off when the medicine was discontinued.

VI. The therapeutic action was decidedly what may be termed alterative—that is, it relieved certain forms of chronic disease, as syphilitic skin affections.

VII. No marked action was observed on the skin or kidneys. Then he says, soon after these observations had been made, and Sir Charles Locock had made known its value in hysterical epilepsy and the nervous affections connected with uterine disturbance, he was led to make further trials of the remedy, and found that—

VIII. Bromide of potassium exerts a most powerful influence on the generative organs, lowering their function in a remarkable degree.

IX. It is a remedy possessing most valuable powers in diseases dependent upon, and accompanied by, excitement or over-action of the generative organs; and hence it may be given with advantage in nymphomania, priapism, certain forms of menorrhagia, especially that occurring at the climacteric period; as likewise in nervous convulsive diseases dependent on uterine irritation; and, lastly, in some ovarian tumours.

X. It appears to produce an anæsthetic condition of the larynx and pharynx; and hence has been usefully employed in examinations of and operations upon those parts.

In the London *Lancet* of May, 1864, bromide of potassium is recommended by Dr. Henry Behrend as a remedy worth trying in cases of loss of sleep, attended or caused by much mental excitement, and as especially adapted to those cases where opiates fail, or make worse instead of better.

In an article published in the *Dublin Quarterly Journal*, in 1864,

by Dr. McDonnell, of the Jervis Street Hospital, the attention of the profession is again called to this remedy, and its efficacy substantiated, by numerous cases of epilepsy in *males* and *females* successfully treated; and reference is made to Dr. Brown-Séquard, Dr. C. Bland Radcliffe and Sir C. Locock, all of whom had previously used it extensively, and with a great degree of success.

Having thus given a partial historical *résumé* of the uses of the bromide of potassium up to the present time, I propose to give the results of my own experience in its use, in epilepsy, in spermatorrhœa, and as a sedative in certain nervous diseases, and first of its effects in epilepsy, illustrated by a few cases.

CASE I.—Miss B., of this city, employed on a sewing machine in a collar factory, applied to me in the summer of 1863. She had one fit each month, usually a day or two before the appearance of the menses, which were neither profuse nor attended with great pain. She was otherwise perfectly well, but the fits were increasing in severity, and she had once fallen in the street. It was then nearly a year since the first attack. I give her at once a solution of the bromide of the following strength:—Potass. Bromid., oz. i.; aquæ, f oz viij. Dose a teaspoonful after each meal. At the next menstrual period, when at work over her machine, she was seized with a sudden dizziness, but there was no convulsion and no loss of consciousness, and in a few moments she was able to resume her work. Encouraged by this effect of the medicine, I advised her to persevere in its use. She left the city shortly after, and I saw no more of her, but was told by an aunt of hers living here, that Miss B. continued to take the medicine for four months, that she had never had a fit since, and was about to be married—this was just a year after commencing the treatment.

CASE II.—Mrs. J., of Green Island, aged 48, of melancholy disposition, had never had any children; came under my care first in Nov., 1864, complaining of pain in the head, dizziness, "hot flushes," and various other symptoms, which sometimes attend upon that period known as the "turn of life." She was at times very despondent, and would shut herself up for days at a time, refusing to see any one. I prescribed such medicine as seemed appropriate to her condition, and which relieved her to some extent, when one evening I was sent for in haste to see her, and the messenger stated that she had two fits in succession. Judging them to be probably hysterical, I carried over with me some fluid extract of valerian, but on arriving at the house, found that she had fallen suddenly, and without any warning—was greatly convulsed—in short that I had to deal with epileptiform hysteria.—Furthermore, I ascertained upon inquiry, that it was just the period in the month (six months having now elapsed since the last appearance of the menses) when she should have been unwell, had she been regular. I then commenced with the bromide, in the same doses as in Case I.—She had twice afterwards, at intervals of about a fortnight, a light seizure in bed at night; then for two months there was no recurrence

of the fits. She then discontinued the medicine, and began to have fits again, not so severe as at first, but sometimes two or three in a week. I then urged her to persevere with the medicine, and increased the strength, giving of the bromide—oz. ij. in water f. oz. viij.—a teaspoonful three times a day. This solution she took steadily for five months, and never had a convulsion after the first dose; is now at this date in the best of health and spirits..

CASE III.—M. A. M., a stout, healthy-looking, intelligent Irish girl, 19 years of age, came to me from Williamstown, Mass., in June, 1866. Her mother, who came with her, stated that she began to menstruate at 14 years of age, and always at each period had one severe convulsion, usually falling when at her work, and was stupid and prostrated for the remainder of the day. In this case I used the solution of the same strength as in the last case, and in the same doses, and felt perfectly confident, from the pathology of the case, in assuring my patient that she would be cured. In her first letter, written after the next period, and when she had taken the medicine only three weeks, she says: "I had a light fit this time, and got over it very soon; I am much encouraged, and think I shall get well." In the second letter, she says: "I am certainly getting better. I had no fit, but felt dizzy for a few moments, and held on to the table. In a few moments I got over it. I shall go on taking the medicine. I have great faith I shall be cured, for surely I am better these two months." I heard no more from this patient until January, 1867, when she wrote that she "had no fits at all, thanks be to God." To this I would add respectfully, and with all reverence, thanks be to God, and Sir Charles Locock too, for it is to him that the unfortunate epileptics owe a debt of gratitude they can never discharge.

CASE IV.—E. S., of this City, clerk, aged 24, of good habits, but formerly used tobacco excessively; but never contracted the habit of masturbation; since the age of 17 had severe epileptic fits, as often as once a fortnight, and at times twice a week; had frequently fallen in dangerous places, and had sometimes been severely injured. He bears upon his face the scars of wounds received in his falls; and was known to several of our physicians and to our police as a confirmed epileptic. In May, 1866, when engaged in hoisting goods, he was suddenly seized, and fell from the third story of the store to the pavement beneath, a distance of thirty feet, fracturing his right thigh and one or more ribs. For a day or two his recovery was doubtful, but he got well, and with a good leg too. During his convalescence, Dr. Charles Freiot, his attending physician, advised him to try bromide of potassium for the cure of his epilepsy. This was in June. He took it but a short time, but enough to see that it exerted a controlling power over the disease. Owing to his lack of means, being out of employment, and the expensiveness of the medicine, he discontinued it during the summer. In November last he commenced taking it again, buying a quarter of a pound at a time, and mixing it himself—one ounce of the salt to a

half pint of water—a teaspoonful three times a day. From that time to this day he has not had the slightest epileptic seizure, and expresses himself as feeling well and in excellent spirits. He has not yet discontinued the remedy altogether.

I might relate other successful cases, but these are enough for the pages of your *Journal*, and enough to convince the most skeptical that, in cases of epilepsy, not having their origin in organic disease of the brain or spinal marrow, its bony walls or its membranes, we have a remedy which should be faithfully tried, and which will, in a large proportion of cases, effect prompt and permanent cures. "*Post hoc ergo propter hoc*" is, I am aware, the argument which too often attaches to some new remedy; but this will, I think, stand the test, if administered in those cases to which it is applicable. It is not infallible by any means, nor is any remedy for any disease.

In a future number, I will relate some cases illustrating the power of bromide of potassium in spermatorrhœa, together with such conclusions as I have arrived at from its use during the past five years.—*Boston Med. and Surg. Jour.*

CLINICAL RECORDS.

"Ex Principiis, nascitur probabilitas: ex factis, vero veritas."

REPORT OF TWO CASES OF LITHOTRITY. Read before the Augusta Medical Society, Dec. 7th, 1865. By R. L. MADISON, M. D., Staunton, Va.

CASE 1.—Miss R., aged 60. About fourteen years before, this lady had a severe attack of colic, occasioned by the transit of a renal calculus, along the ureter, but which yielded to the usual relaxing remedies at the time, and seems to have occasioned no anticipations of future trouble. Twelve or eighteen months afterwards, however, symptoms of cystitis, combined with nephritic disorder, set in, which continued slowly but steadily to increase, with paroxysms, at times, of great severity until May, 1863, when she consulted Dr. McClung, of Lexington, Va. Under his care her condition and symptoms were ameliorated; still the cystitis continued, and on the 8th of September I saw her with him for the first time. Her health was seriously impaired by constant pain—she was confined to her room, and spent most of her time in the recumbent posture; being greatly harassed by frequent and painful mic-

turition. An exploration of the bladder revealed the cause of her sufferings to be a calculus of large size. The sound, although used with gentleness, gave severe pain.

Finding, by analysis, that the stone was phosphatic, it was decided to crush it.

Accordingly, five days afterwards, (Sept. 13, 1863,) Dr. McClung being present and assisting, the patient was chloroformed, the bladder injected with about two ounces of tepid water, and the crushing commenced. The first sitting occupied about three minutes.—Anodyne at night, and demulcent drinks ordered.

Sept. 21.—Had suffered considerably for several days following first setting. Is now better. Second sitting proceeded with as in the first instance. Duration about the same.

Sept. 24.—Third sitting.—Operation proceeding satisfactorily to us, but without diminution of suffering to the patient.

Sept. 29.—Fourth sitting.—Duration five minutes; progress good.

Oct. 1.—Fifth sitting.—Large quantities of débris passed since last sitting; patient in better spirits; less vessical irritation.

Oct. 4.—Sixth sitting.—Calculus very perceptibly smaller.—One fragment very hard and smooth, supposed to be the neucleus.

Oct. 7.—Seventh sitting. Had passed several small portions of stone and débris. Nothing now remained in the bladder but the nucleus. This nucleus was too hard to be crushed with the simple lithotrite, which had been employed up to this time; and it was not deemed expedient to withdraw it, for fear of lacerating the neck of the bladder and causing incontinence. The difficulty, however, was happily solved that very night, by the patient voiding the nucleus per urethram, which proved to be of uric acid, and of large dimensions.

After this the symptoms rapidly disappeared, and in a short time she was entirely well.

Thus was a large phosphatic calculus safely and successfully removed in seven sittings, the average duration of each being from two to three minutes. Dr. McClung was present on each occasion, and we both concur in the opinion, that without anæsthesia, the operation would have been impracticable.

Case 2.—Miss P. B., aged 55. Saw this lady on the 29th of Nov., 1864, and obtained from her the following history of her case: Eighteen or twenty months previously, she began to suffer pain in the region of the bladder, with scalding and frequent micturition. These symptoms becoming more and more severe, she placed herself under the care of Dr. Churchman, of Greenville, Augusta County, Va., who discovered a vesical calculus. During the Summer of '64, the late Dr. Hay, and himself, removed a fragment of stone through the urethra, after which she had incontinence. Coming in November to reside in the vicinity of Lexington, my friend, Dr. Churchman, advised her to consult me in reference to her case.

An examination revealed a deplorable condition, which may be thus briefly presented:

Emaciation extreme; suffering constant and intense; incessant dribbling of urine; excoriations and fissures on the vulva and parts adjacent; much swelling; great tenderness; and, as if this was not enough, the external genitals and the entire tract of the urethra were completely encrusted with calcarious deposits.

After administering chloroform, I sounded the bladder and found it encrusted in the same manner as the urethra, with two or three fragments lying loose in the interior of the organ. These were carefully crushed, the bladder gently washed out, and then injected with about one ounce of melted lard. Introduced a suppository of morphia, two grains.

This completed the first sitting—time four or five minutes. She was now ordered a wineglass full of infusion of buchu and bearberry, with twelve drops of nitro-muriatic acid, three times daily; half grain of morphia every night; anodyne fomentations externally.

Dec. 2.—No improvement. Under chloroform succeeded in removing all the incrustations from the external genitals and urethra, and also detached and removed a considerable quantity from the bladder. Local and general treatment continued. Duration of sitting ten minutes. The detachment of the adherent deposits required the greatest care.

Dec. 6.—Condition bad as ever. External organs and urethra

encrusted, as before, with deposits from the urine and mucus.—These were again removed, and other portions cautiously dislodged, crushed, and washed from the bladder. Duration of third sitting, nine minutes.

Dec. 10.—Dr. H. M. Estill present. No improvement; removed incrustations from urethra and bladder, and injected Acidi. Nitrici. gtt. iij., Aq. Distillat. ʒj., followed after a short interval, by injection of melted lard; other treatment unchanged. Duration of fourth sitting twelve minutes.

Dec. 14.—Tumefaction much reduced; parts less encrusted; had passed large quantities of sand since last visit; removed portions of deposit from the bladder. Last measures repeated. Duration of fifth sitting, six minutes.

Dec. 19.—Removed from the bladder every particle of deposit, injected with melted lard, and gave, in addition to the other remedies one-tenth of a grain of strychnia, three times daily, to try and correct the incontinence. Duration of sitting, eight minutes.

Dec. 24.—Condition almost as bad as at the first visit, the bladder, urethra, and external parts being thickly encrusted with deposits. Almost in despair, I again removed the crusts, gently detaching all the deposits, syringed the bladder with the weak acid, injected melted lard, and used the morphine suppository. Previous treatment continued. Duration of sitting, ten minutes.

Dec. 29.—External parts and urethra decidedly improved; incrustations partially re-formed in the bladder, but which were easily detached and removed, leaving the interior clean. Duration of sitting, five minutes.

Now, throughout the whole period of treatment, the incontinence continued, constituting the chief barrier to a cure, and occasioning excessive annoyance. In fact, the constant dribbling caused excoriations in the first place, and prevented their healing in the second. The strychnia had now to be abandoned, as none could be had, and the muriated tincture of iron was substituted for the acid.

Jan. 8, 1865.—The sound detects no incrustations in either the bladder or urethra. From and after this date she continued to improve in health and strength. I have been unavoidably prevented from seeing her since, but have heard quite often that her general

health is reëstablished, that she is performing her usual avocations, but is still annoyed with the incontinence, which, I think, might yet be cured by appropriate remedies. Success in this case was attained in eight sittings, the difficulty being, not in crushing the deposit, but in detaching it from the mucous surface to which it so tenaciously adhered, and which required extreme care. The tendency to rapid reformation was another and very formidable obstacle, but which at length yielded to patience and perseverance.

At each sitting, except the last, chloroform was administered, the morbidly sensitive condition of the bladder rendering its use imperative.

Remarks.—The only lithotrite employed in both of the above described cases, was a small pair of *dressing forceps*; and although a Civiale or a Thompson might be shocked at the use of such an instrument for such a purpose, yet it shows by what simple means lithotrity, in the female, may be accomplished, even when complicated with excessive inflammation.

* No previous dilatation of the urethra was resorted to in either case. In fact, the dilatation proceeded "pari-passu" with the crushing, being caused by the separation of the handles of the forceps in the act of grasping the calculus or a fragment. Nor do I think it often necessary to dilate the urethra much, unless the calculus is very hard, which is rarely the case in this limestone region.

In the first mentioned case, however, the dilatation was sufficient after the seventh sitting to allow an uric acid nucleus three quarters of an inch in length, and half an inch in diameter to pass without difficulty; and nuclei of these dimensions are comparatively rare.

I am led to this remark, because great stress is laid by some writers on the necessity of previous dilatation, by graduated bougies, sponge tents, &c., all of which proceedings are to be regarded as rather more curious than useful; and generally only occasion loss of valuable time.

* Necessity, not choice caused me to adopt this instrument. We were in the midst of war—my lithotrity case had been lost. It was impossible to obtain surgical instruments or appropriate medicines, The dressing forceps was therefore literally a "dernier resort."

In all cases of nephritic or vesical disorder occurring in a lime-stone section, the first and paramount indication is to abandon the use of lime-stone water, which, however innocuous in health, is exceedingly irritating to an inflamed mucous surface; and its continued use will oftentimes render treatment entirely nugatory. By boiling, the lime is precipitated, and may thus be rendered harmless, although rain or free-stone water is to be preferred.

Lime-stone water never *originates* calculus; but, where the predisposition already exists, or where chronic irritation of the bladder or kidneys is present, it becomes one of the most powerful exciting or determining causes of this distressing affection.

The cardinal indications in the treatment of stone in the bladder seem to be: 1. to correct the diathesis; 2. to allay irritability and pain; 3. To remove the calculus; and 4. To support, if necessary, the strength; and, commonly, we must endeavour to meet them all at one and the same time.

In reference to the first, the proper selection of remedies must be based upon a careful analysis of the urine. Regard must be had too to the previous habits of the patient, the duration of the malady; the amount of local disturbance; and the condition of health at the time. The second indication is fulfilled by injecting into the bladder, in quantity not exceeding two ounces, a warm infusion of opium, poppies, or hops, aided by injections of melted lard which is preferable to olive oil, as it adheres more tenaciously to the mucous membrane—lubricates it better, and also by combining more readily with the calcarious matter, saponifies and softens it. Great comfort is also derivable from the nightly exhibition of a large anodyne suppository.

The *third* indication is met by carefully crushing the calculus piecemeal (in which procedure the maxim "festina lente" is most appropriate), gently washing out the débris, and also by injecting weak acidulated solutions calculated to erode and soften the stone, without doing injury to the irritated mucous surface. The last indication of supporting the strength by light, digestible, and nutricious diet is by no means the least in value, inasmuch as in a large per cent. of these cases the constitution is seriously impaired, and the health broken down by continuous and protracted suffering.

After removal of the calculus it is safe and expedient to keep up the constitutional treatment for several weeks, the nature of which is determined of course, by the individual diathesis.

ORIGINAL CORRESPONDENCE.

"Sit mihi Fas scribere audita."

PARIS, May, 1867.

In a clinical lecture lately delivered at the "Charité," Professor Monneret exposed the results of a new plan of treatment which has been successfully employed in sixty cases of lead poisoning observed in his wards. For M. Monneret, this malady constitutes a general affection, a "morbus totius substantiæ," due to the introduction into the organism of lead molecules under different forms of preparation. The affection being *general*, its effects manifest themselves upon the nervous, muscular, &c., systems, and produce disorders in proportion to the dose of poison absorbed, or to individual susceptibility. The "Charité" has long enjoyed a reputation for the treatment of this disease, and the hospital has been widely known in Paris since the period of its administration by the monks who employed empirically the solution styled "Eau bénite de la Charité," which was composed as follows:

℞—Tartre Stibié..... 3 decigrammes.
Eau.....250 grammes.

(A grain is equivalent to 5 centigrammes.)

Considering that in an acute manifestation of the disease, the nervous system principally calls for relief from the violence of the pain, M. Monneret was led to try the effects of *cold*, from a knowledge of the powerful sedative influence this agent has over the nervous system, by lessening the sensibility of the skin, the muscles, &c. M. Monneret employs cold *intus* and *extus*, as will be seen by the following description of the treatment he has recently adopted: As soon as a patient enters the hospital suffering from an attack of colics he is given: 1st. An iced lemonade

and iced wine, as well as small lumps of ice, is placed at his command. As large a quantity of the lemonade is administered as can be taken. Three enemas containing nothing but very cold water are exhibited daily, and are retained as long as possible. 2d. A hydro-therapeutical establishment is connected with the hospital, and is provided with the various necessary forms of apparatus.—The patient is submitted to the action of the *douches* two or three times daily, but the shower is kept up only for *one minute* each time. The whole surface of the body, save the head, which is protected by an oil-cloth covering, is exposed to the *immediate* contact of the water, whose action is not merely to refrigerate, but also to stimulate the vessels of the periphery. On receiving the shock the vascular nerves cause the muscular coat of the capillaries to contract and expel the blood; *reäction*, however, promptly takes place and being, as it is known, equal to the *action* it follows, the effect obtained—though varying with individuals—is to produce a renewal of the vitality of the tissues, so that a cold, apparently bloodless skin receives warmth, colour, etc., after having been submitted to this treatment. In the sixty cases of saturnine intoxication, M. Monneret has combated by the above plan, improvement in the condition of the patient was speedily noticed, but the beneficial action of hydro-therapeutics seemed to be still more marked when the abdomen was covered with a cold poultice. M. Monneret, in his lecture, described the way of making the poultice, which is preferable to local applications of ice contained in sacks. A coating of *dry* flax-seed meal about half an inch thick is spread evenly over a towel. On this surface, a number of lumps of ice, each a little larger than an olive, is placed, the lumps being so close together as nearly to come into contact. Over this second layer, another coating of *dry* flax-seed meal similar to the first is laid, and a second towel serves to complete the envelope of the poultice which is made of sufficient size to cover the whole abdomen. The lumps of ice arranged in this manner melt so slowly, that the poultice is still cold two or three hours after having been applied, and a considerable amount of refrigeration has been obtained with as little loss as possible. In the sixty cases in which M. Monneret applied the foregoing treatment, relief was in every instance—save

twice where the disease was of long standing—promptly obtained, the action of *cold* appearing to assume almost immediate control over the painful nervous manifestations of the affection. Generally speaking, however, constipation does not yield until the fifth or six day. If the patient is annoyed by this circumstance, a purgative enema is administered, or M. Monneret would feel disposed to try a plan which has been successfully employed by M. Guibout of the "St. Louis" hospital in this City, and which has been mentioned in a recent number of the *Gazette des Hôpitaux*. M. Guibout gives daily a mixture containing equal parts of sublimated sulphur and honey, say 25 grammes of each, (a grain is equivalent to five hundredths of a *gramme*.) This mixture is divided into three doses, to be taken in the course of twelve hours, and usually on the second day of its administration diarrhœa sets in, and from that moment the doses are gradually diminished.

Professor Monneret recommended the hydro-therapeutical plan of treatment to the proprietor of one of the large manufactories of painting materials in Paris. The suggestion was at once acted upon, and care has been taken to place the workmen under the influence of *cold* as soon as signs of poisoning become manifest.—So far the most satisfactory results have attended the execution of this idea, and the workmen themselves apply for treatment at an early stage of the disorder. I must add that no restriction is made as to the diet, full latitude being granted in this respect. In recommending this new method of treatment, M. Monneret of course does not pretend to cure radically the saturnine affection—his only aim is to master promptly the painful nervous symptoms the disease engenders, and at the same time he hopes by this means to lessen and diminish the violence and the frequency of the attacks, especially if workmen or painters do not neglect the teachings of hygiene and avoid the abuse of alcoholic liquors. I have, at the request of M. Monneret, weighed the patients submitted to this treatment, and I subjoin the series of figures obtained in a few cases, in order to show the influence due to hydro-therapeutics and *cold* upon the weight, which, according to M. Monneret, can be considered as expressing the condition of the *general health*—for if a function become impaired, (as in the case of a flux, etc.,) the

scales will immediately give warning of the disorder. If, on the other hand, an impaired function be restored to its proper channel, or a symptom of disease be happily modified, it is in either case a physiological idea to assume, that *a series of weights* which bears witness to the slightest variations in the state of the *general health*, must chronicle the return of order, on the cessation of disease. In a previous letter I furnished a short description of the process of weighing as employed in M. Monneret's ward at the "Charité," and hence I need only say at present that great care is taken to secure reliable results. I give now three cases of lead poisoning treated by the new method. These cases represent the results obtained in numerous observations, where a corresponding increase of weight has been remarked.

Obs 1. Lead poisoning } Hydro-therapeutical and cold treatment,
Colics—Constipation, } as described above.

Dates.		*Weights.* Kilogram.(a)	Grammes.
1867.			
Feb. 16,		60	400
" 17,	I	60	500
" 18,		60	500
" 19,	D	60	300
" 20,		60	800
" 21,	I	61	100
" 22,	D	60	800
" 23,		61	020
" 24,	I	61	250
" 25,		61	750

(a) A pound avoirdupois is equal to 453.4148 grammes, hence a kilogramme weighs *more* than two pounds avoirdupois.

(b) I—increase } of weight.
D—decrease }
See clinical notes.

Clinical Notes.

Feb. 16th. Very severe colics and intense constipation. Weighed before beginning the treatment. Feb. 17th. The colics and painful symptoms entirely disappeared.—Feb. 18th. No more pain; still constipated. Feb. 19th. Had yesterday three copious stools; the weight which had begun to ascend falls off under this influence.—The patient eats heartily. Feb. 20th. The increase in weight since yesterday is remarkable, but coincides with the general condition and the appetite, which are excellent. The patient considers himself cured. Feb. 21st. The weight still increasing—no passage since the 18th. ℞—A purgative enema. Feb. 22d. Had three copious passages yesterday; the weight is found this morning to have decreased. Feb.

23d. The weight reäscends. Feb. 24th, 25th. The improvement is very well marked, and the patient, who considers himself cured, demands his discharge on the 25th. From the 16th to the 25th he had gained 1350 grammes in weight.

Obs. 2. Lead poisoning—colics } Hydro-therapeutical and cold
Constipation—articular pains, } treatment as above.

Dates. 1867.		*Weights.* Kilogram.	Grammes.	*Clinical Notes.*
Mar. 16,		53	450	The patient who works at a manufactory of painting stuffs at Clichy, enters hospital on March 15th. At the morning visit on the 16th, he is found to be suffering severely from *colics* and articular pains; (these last are nervous, and according to M. Monneret are under the influence of the the lead poisoning,) he has besides been constipated for several days.
" 17,		53	800	
" 18,		54	000	
" 19,	I	54	250	
" 20,		54	400	
" 21,		54	750	
" 22,		55	100	
" 23,	D	54	600	
" 24,		55	100	
" 25,	I	55	600	
" 26,		56	200	
" 27,	D	55	600	

The *cold* treatment is ordered to be followed immediately. I weigh the patient before its commencement, and find 53k 450. March 17th. The *colics* and articular pains have entirely disappeared, and so great is the improvement, that the patient believes himself cured, and speaks of advising his comrades to follow the same treatment when suffering from saturnine accidents. Complains of being hungry, although he had not been dieted; he is allowed an additional amount of food. I find the weight to have gone up considerably since yesterday. March 18th, 19th, 20th, 21st, 22d. During this series of days the treatment is kept up, the only part suppressed being the cold poultice. The colics and other painful symptoms have not returned. The patient is doing very well, eats heartily, still constipated, however, although the cold enemas are continued. The weight goes on increasing rapidly. He complains of the constipation which gives a little dull headache.

March 23d. Had yesterday, after being weighed, three copious stools which procured great relief, removing the unpleasant head symptoms due to constipation. The weight is found to have lessened considerably 24th, 25th, 26th March. The weight has resumed

its ascension; the patient considers himself cured and wishes to be discharged; has had no passages since the ones noticed on the 23d. The treatment is always kept up, save the poultice, of which there is no longer need.

March 27th. Had yesterday two copious stools, and another this morning shortly before being weighed. These stools account for the diminution observed. The patient leaves the hospital to-day at his own request, entirely relieved from the symptoms remarked at the time of his admission.

Obs. 3.—Lead poisoning—Hydro-therapeutical and cold treatment as above described.

Clinical Notes.—The patient is employed in a lamp manufactory, where his occupation consists in soldering with lead. He enters hospital on the 11th March, 1867. Two years ago he had an attack of colics for the first time. Six months later he had a second attack and noticed then a partial paralysis of the extensor muscles. Three months afterwards the colics returned. From that time on, the attacks became more and more frequent, still the patient after each indisposition continued working at his old trade, and now he has severe colics regularly every five or six weeks. Paralysis and partial atrophy of the extensor muscles are noted. He is constipated during the time the colics last, but otherwise the bowels are regular. He suffered severely from colics last week, but at present he is apparently well, save the paralysis and atrophy. His idea in entering the hospital is to endeavour to keep off the next attack. The hydro-therapeutical and cold treatment (except the cold poultice of which there is no need as the patient does not at present suffer from colics) is ordered on the 12th.—Before beginning the treatment I weigh the patient and find 56ᵏ700.

Dates.		*Weights.*	
1867.		Kilogram.	Grammes.
Mar. 12,	I	56	700
" 13,		57	100
" 14,		57	400
" 15,		57	600
" 16,		58	000
" 17,		58	200
" 18,		58	320
" 19,		58	450
" 20,		58	500
" 21,		58	550
" 22,	D	57	900
" 23,		58	000
" 24,		58	000
" 25,		58	100
" 26,		58	250
" 27,		58	400

No restriction is made as to diet. On the 13th the weight is found to have increased. An additional quantity of food is granted at the request of the patient, and wine is placed at his command.—The weight goes on augmenting till the 21st. On that day the patient had four copious stools, and the next morning the weight was found to have decreased. From the 23d till the discharge on the 27th of the month, the weight again ascended.

This last observation is not offered as a specimen of the action of the treatment M. Monneret proposes in cases of acute symptoms due to lead poisoning—for here acute symptoms were absent—but is intended to show the action of hydro-therpeutics upon an organism which had long been under the influence of the Saturnine intoxication.

In the three foregoing observations which are given as specimens of numerous others in my possession, it may perhaps be urged that the increase in weight is due to the complete repose which attends residence in a hospital, and also to the healthy diet given to the patients. Without denying the influence of these causes, M. Monneret thinks however that a large share of the increase must be attributed to the hydro-therapeutical treatment instituted, which gives new life to the tissues and stimulates sluggish functions.—The increase of weight noticed in these instances is not peculiar to the hydro-therapeutical treatment applied to lead poisoning *alone*, for I give lower down some observations demonstrating that similar results attend its application to hysteria. Before doing so, however, it may not be uninteresting to compare the hydro-therapeutical with the evacuating plan of treatment usually employed to combat lead poisoning, and for this purpose I append the series of weights obtained in some cases in which evacuants were exhibited.

Obs. 1.—Lead poisoning—Third attack of colics—Paralysis of the extensor muscles—Constipation—Bilious complication.

Dates.	*Weights.*		*Clinical Notes.*
1866.	Kilogram.	Grammes.	
July 4,	64	900	July 4th. Very severe colics—℞—Emetic, gr. iij., diet. July 5th. Vomited several times yesterday. The colics have not disappeared, and the patient is still constipated. Diet and ℞—Croton
" 6, D	63	700	
" 9,	63	320	
" 11, I	63	600	

oil gtts. ij. July 6th. Several stools yesterday—still a little colic—the weight has fallen off very considerably. The croton oil acted again on the 7th, and although no more medicine was administered, and the patient was allowed to eat on the 7th, still the weight continued declining until the 9th, when it reached its lowest figure. After that date it began to ascend slowly, and the patient finding himself relieved from the colics and constipation, left the hospital on the 17th.

Obs. 2.—Lead poisoning—colics—Constipation—Bilious complication.

Dates. 1866.	*Weights.* Kilogram.	Grammes.	*Clinical Notes.*
July 4,	66	250	July 4th. Patient suffering from colics and constipation.—℞—Tartar Emetic gr. iij. He is weighed before beginning the treatment, and is dieted. July 5th. Vomited a great deal yesterday, but is still constipated and suffering from the colics which are, however, less severe than yesterday. The weight has gone down considerably. ℞—Croton oil gtts ij. July 6th. Had three stools yesterday. The colics have disappeared. He is allowed to eat. The weight is found to have fallen off again. On the 7th, 8th, and 9th, the patient is doing well, and the weight ascends. On the 9th he is discharged at his on request.
" 5, D	65	520	
" 6,	64	950	
" 7,	65	000	
" 8, I	65	410	
" 9,	65	700	

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Obs. 3.—Lead poisoning—Seventh attack of colics—Constipation—Articular pains—Cholera symptoms.

Dates. 1866.	*Weights.* Kilogram.	Grammes.	*Clinical Notes.*
July 18,	50	150	July 18th. The patient suffering from colics and constipation, which last is of long standing.—℞—Tartar Emetic, gr. iij., and later in the day, ℞—Croton oil, gtts. iv., diet. He is weighed before beginning the treatment. July 19th Much vomiting and
" 19, D	49	400	
" 20,	49	100	
" 21,	49	300	
" 22,	49	400	
" 23, I	49	400	
" 24,	49	600	
" 25,	49	100	
" 26,	48	800	

" 27,		48	400	several stools yesterday. The
" 28,	D	48	200	patient is allowed a little to eat.
" 29,		47	500	Colics less severe. The weight
" 30,		47	300	falls off till the 20th, and then
" 31,		47	200	ascends till the 24th. The satur-
Aug. 1,	I	47	300	nine intoxication has taken deep
" 3,		46	200	root in the organism; the patient
" 4,	D	46	000	is very feeble. On the 24th
" 5,		46	000	(after having been weighed) he
" 6,		45	900	is taken with symptoms of cholera
" 7,	I	46	100	which existed then in an epidemic
" 8,	D	45	900	form in this City. The cholera
" 9,		45	700	symptoms were at first slight;

still they could not be checked, although every attempt to arrest their progress was made. From the 28th to the 29th, the diarrhœa became more frequent. From the 30th to the morning of August 1st, the patient seemed to do better under the influence of stimulants, but on that day, without any cause save the epidemic influence, the diarrhœa returned with greater intensity than ever, and on the 3d the weight was found to have gone down in a remarkable manner. From the 3d to the 7th the patient was alternately better and worse, and on the 7th the weight was found to have ascended. From that day on to the 9th, when the man was withdrawn from the hospital by his family, the weight again decreased.

Remarks.—The foregoing observations show the rapid *decrease* of weight under the influence of tartar emetic and croton oil, which forms a striking contrast with the *increase* noted under the effects of hydro-therapeutics. The cholera symptoms which appeared afterwards in the last case, exhausted the patient more and more, and the series of weights, affords, in all these cases, a means of following the fluctuations presented. These fluctuations are very striking when graphically represented, and permit the general result of a disease or plan of treatment to be taken at a glance. The limits of this paper do not permit the introduction of graphical representations.

From what precedes, a parallel may be drawn between the two methods—the hydro-therapeutical and evacuating—applied to the treatment of saturnine intoxication. (The observations given above

are typical of the results *generally* obtained.) It has been seen that with the first plan the weight ascends rapidly. It seems a physiological idea to consider the weight as being a correct barometer—so to speak—*of the general health*, for as long as the general health, which is the result of the physiological working of the different functions, remains unimpaired, the weight must also remain stationary. Should disease intervene, then immediately and even before any symptoms of disorder are apparent, the weight goes down. When, on the other hand, the vitality of diseased tissues is renovated by an agent as powerful as hydro-therapeutics, which gives new life to the circulation, exerts a powerful influence over the nervous system, etc., the general health becomes improved by a return of the altered functions to their natural condition, and as a consequence, the barometer must go up, or in other words, the weight must ascend, thereby marking the improved state of the organism. The evacuating plan, on the contrary, instead of repairing, destroys the organism, as is asserted by the falling off of weight. The measure of this destruction is of course at the command of the Practitioner, save in exceptional cases, of which the observations immediately preceding these remarks may be considered as an example. It is true that it is intended to destroy or remove the disease at the same time that the drain is practiced upon the intestines. Without, therefore, venturing yet to conclude in favour of either of the above methods of treatment, the parallel they suggest may not prove devoid of interest. One increases the weight—whence the conclusion that the general health is improved; the other (evacuants) diminishes the weight—whence the thought that the organism is enfeebled as long as the plan is pursued.

It has been remarked above that the action of hydro-therapeutics in increasing the weight is not peculiar to lead poisoning, for a similar result is usually noted when the same treatment is applied to cases of hysteria. I append a few observations of this last affection treated by the douches.

Obs 1.—Hysteria—Douches, } A female servant, æt. 19, enters hospital on April 4th, 1867, to be treated for hysterical symptoms. The douches are ordered on the 6th.

Dates.	*Weights.*	
1867.	Kilogram.	Grammes.
April 5,	57	700

" 6,	57	000	
" 7.	57	650	
" 8,	58	200	
" 9,	58	500	
" 10,	58	800	
" 11,	59	000	
" 12,	59	000	
" 13,	59	700	
" 14,	59	900	

Clinical Notes.

April 5th. Has a violent attach of hysteria, vomits, etc.—April 6th. She is weighed this morning before beginning the douches, which are to be taken morning and evening. Last night she had but little sleep, having been much agitated. The weight has decreased. April 10th. It will be seen that the weight is ascending rapidly. April 11th. Yesterday morning on returning from the douche, she noticed an eruption on her body. This eruption resembles urticaria, and causes itching. The eruption is general, but on the limbs it is more intense than elsewhere. This congestion of the skin is attributed to the action of the douches upon the vascular nerves of the capillaries. There is also œdema of the lower limbs, which from its sudden appearance and the absence of heart-disease, M. Monneret attributes also to the effects of the treatment upon the vascular nerves. The hysterical symptoms are notably lessened. April 12th. The eruptions continue as yesterday; patient eats heartily. 13th. The douches are always continued. The eruption begins to fall. 15th. Discharged to-day doing well. Eruption still visible on the arms and legs.

Obs. 2.—Hysteria—Hydro-therapeutic } On the 7th April, 1867, a female servant 25 years old, was admitted into hospital to be treated for hysterical attacks. The douches (twice daily) are ordered on the 29th. Regularly menstruated, between the periods she has had for several months a semi-purulent vaginal flux. General health good otherwise. Eats well.

Dates.		*Weights.*	
1867.		Kilogram.	Grammes.
Apl 28,		64	100
" 29,		64	200
" 30,	I	64	400
May 1,		64	700
" 2,		65	450
" 3,	D	65	200
" 4,		65	400
" 5,	I	65	600
" 6,		65	900
" 7,		66	300
" 8,		66	200
" 9,	D	66	000
" 10,		66	000
" 11,		65	900

Clinical Notes.

April 29th. Begins the douches to-day. May 3d. The patient says the vaginal flux is more abundant to-day, and she attri-

butes this to the treatment, which, however, she does not wish to discontinue as the hysterical symptoms have considerably lessened.

May 4th. She has observed the flux to have decreased since the preceding observation. It is difficult to decide what reliance can be placed on her assertions in this respect, the patient being herself the *only* judge of the quantity of the flux, but in the absence of any other explanation, and having no reason to doubt the woman's veracity, M. Monneret believes that the greater or less quantity of the flux, has an influence upon the weight. On the 8th, 9th, and 10th May the flux again increased, and the weight went down.—This increase is attributable to the monthly period which is expected. May 10th. The menstrual flux appeared this afternoon. 11th. Menstruation continues this morning, the weight has again fallen off. The patient is discharged to-day at her own request.

Remarks.—This observation is interesting in several respects, for the weight, notwithstanding the oscillations due to the vaginal flux and menstrual function, increased considerably (1,800 grammes) during the time the patient was submitted to the action of the douches.

I might furnish other observations to corroborate the testimony of the preceding, but I fear to lengthen further this paper, and besides, I believe that the foregoing remarks and illustrations will suffice to show the results *generally* obtained from the employment of hydro-therapeutical treatment. T. L.

[In the letter which appeared in the May issue of the Journal, (page 449, lines 2d and 3d) the name of M. Velpeau was accidentally substituted for that of M. Vulpian.]

FLORENCE, May, 1867.

It is generally admitted, that the sound which accompanies the *diastole* of the heart, is due to the resistance of the semi-lunar valves, which remain closed until the ventricles are full, and that the systolic sound is produced by the resistance of the auriculo-ventricular valves, which, to prevent regurgitation, remains closed until the ventricles are empty again. To judge by the points where the two sounds are most distinctly perceptible, this theory must be

the true one, and an additional argument in its favour, may be found in the fact that the systolic sound, which is supposed to be due to the pressure of a large and decreasing quantity of blood, is, as it ought to be, louder and shorter than the diastolic sound, which, according to this theory, is the result of the pressure of a small, but increasing quantity of blood.

Nevertheless, the question arises, why no sound should be produced by the papillary muscles, (the poet's "heart-strings,") or by the rushing of blood through narrow apertures, such as join the *atria* with the ventricles of the heart. I do not know why physiologists refuse to admit these as possible sources of sound. At all events, there are pathological phenomena which could hardly be accounted for, if the semi-lunar valves were the only possible sources and seats of diastolic sounds.

The Turin Academy of Medicine had, some time ago, a two day's discussion on this point, and although it led to no definite conclusion, the fact which gave rise to the discussion, seems interesting and important, in as far, at least, as it may furnish some new data to our very defective semiotic knowledge of heart diseases.

Professor Nicolis, one of the members of the Turin Academy, stated that in examining patients affected with diseases of the heart, he had often observed an abnormal diastolic sound, differing from the normal sound, not only in rythm, but also in the place of its greatest distinctness. Its rythm he qualifies as a "*tac, tac, tac,*" not unlike that of a quail's cry, the point where it is most audible, corresponding to the site of the mitral valve, and not (as the normal sound does) to the orifice of the aorta. In some very few cases the same sound was perceptible in the region of the right heart, and then, too, in the point corresponding to the site of its auriculo-ventricular valve. But, according to Prof. N., these cases are extremely rare. The sound in question is only produced during the ventricular diastole, and is always (so our author says), a sign, or a consequence of a slight thickening—and only a slight one of the mitral, or in very rare cases of the tricuspid valve; whereas, the higher degrees of hypertrophy of these valves, which produce far graver disturbances in the circulation, fail to produce the valvular bruit described above.

This last circumstance would, indeed, go far to show that the bruit cannot proceed from the arterial orifices, or their semi-lunar valves, if we knew that Prof. N.'s diagnoses had been duly verified by a sufficient number of post mortem examinations. The whole worth of the assertion depends and hinges on the correctness of the diagnosis, and we all know how difficult and how fallacious these are in diseases of the heart.

The special commission appointed *ad hoc* by the Academy, had occasion to satisfy themselves on the reality of the diastolic sound in the case of a new patient, sent up on purpose by Prof. Nicolis. Yet, they would not agree with him, either on the probable cause or the semiotic interpretation of the symptom. Professor Moleschott thought that a reduplication of the cardiac sounds was possible during the systole, as well as during the diastole; that the papillary muscles, especially when their extension was not strictly isochronous, might by clashing against each other, produce a quivering systolic sound; that he had induced a double systolic bruit in rabbits, by galvanising the pneumogastric nerve, and that similar sounds (systolic ones at least) had been noticed in the human heart, without any organic affection.

However interesting these facts may be, Professor Moleschott's remarks seem hardly relevant, as they refer to systolic sounds alone. One cannot wonder, therefore, that the discussion ended in nothing but a reässertion, on the part of the Academy, of the old dogma, that the normal diastolic bruits proceed from the semi-lunar valves, and that it is probable, therefore, that the pathological sounds also come from the same quarter, although Professor Nicolis emphatically remarked, that he had never observed the symptom in question in any of the numerous affections of the arterial orifices, which he had had occasion to examine.

He has, since then, reported on another case where he had observed the diastolic *tic-tac*, and where, after death, the mitral valve was found thickened, no other organic defect being referrible.

The question, therefore, remains *sub judice*. But should the researches of other Practitioners confirm Prof. N's. new theory, we could only congratulate ourselves on the acquisition of this new way-mark. We all know, and many of us admit, that in cases of

pulmonary phthisis, and many other diseases of the lungs, we can easily enough dispense with the stethoscope. But what could we do without it in diseases of the heart? Considering, moreover, that many medical men never learn how to auscultate the heart, and that those who have learnt, are apt to forget it again, (unless they have hospital practice,) we cannot wonder at the frequent errors committed in the diagnosis of heart complaints. If, in addition, the few fundamental rules that have guided us hitherto, were proved to be faulty or incomplete, corrections and additions like the one now offered by Prof. Nicolis, could not fail to be extremely welcome to us.

Far less interesting than the labours of the Turin Academy, are the doings of her Florentine sister. The Florence Academy is new, or young, I should say, and the consciousness of new existence, which makes children so playful, seems to have a similar effect on learned assemblies. The numerous medical societies, associations and academies, which have sprung up in Italy like fungi, since '59, have hitherto done little more than playing at Parliament, that is to say, discussing their own statutes and electing their own Presidents and Secretaries. And, as to the medical Congresses, which have so ostentatiously been fidgeting about like *ignes fatui*, from the Alps to the Adriatic, they seem to meet for no other purpose than to discuss when and where they shall meet again. Of course, we need not despair for all that. After their juvenile gambols, executed in the first exuberance of freedom (of association), these learned bodies are pretty sure to give us some more serious and useful performances. In the meantime, let us take what we can get, and be thankful, even to the Florence Academy, for a not unimportant contribution to therapeutics.

I refer to a paper, read in a late sitting, on the treatment of *scabies*, and the new remedies proposed against it, especially petroleum and phenic acid. The author admits that they all kill the *acarus*, but thinks that, on the whole, no treatment can be safer, pleasanter and more reliable than the old one, consisting in soap baths and local applications of sulphur ointment. It is tantalising to think that such a treatment should be reserved for itch alone, considering that it might (the soap baths, at least) be recommended

against all the national sores of Italy. For, without going as far as old Liebig, who says that he can statistically measure the civilization of a country by its consumption of soap, one must applaud anything that tends to encourage and propagate the use of that article in this country. The author of the memoir then goes on to say, what is perhaps not generally known, that petroleum acts more slowly; that it does not prevent relapses, (though if it does kill the acarus, these relapses become unintelligible,) and finally, that it often induces secondary eruptions, which are apt to become extremely troublesome and obstinate.

Similar secondary eruptions have been observed after the use of phenic acid, which, moreover cannot be relied on, on account of the extreme difficulty of its doseage. More certain and less dangerous, though infinitely milder than either, is the styrax liquida. Yet, none of these remedies can, in the author's opinion, replace the old mode of treatment, and in this opinion, all those that took part in the academical discussion, unhesitatingly concurred. One of them, a Dr. Grilli, related some rather curious cases, where the patients being inmates of the lunatic asylum, he thought it inconvenient to apply the soap baths. These patients were treated with naphthaline, and although the remedy was applied with all due precaution, it gave rise to a series of most alarming symptoms, such as collapsus, great anxiety and cyanosis, which fortunately did not prove fatal. Another case of blood intoxication, in consequence of the use of petroleum was mentioned by Prof. Pellizzari, the symptoms being, strange to say, not unlike those of poisoning with lead, and in several other cases the petroleum applications had produced pemphigus-like eruptions, far more troublesome than *scabies* itself.

One of the most useful institutions, that owe their existence to the transfer of the Italian capital, is Dr. Cesare Conti's private Ophthalmic Dispensary in Florence. Diseases of the eye are notoriously frequent in Florence. Ophthalmia, but more especially what Dr. Conti calls granular ophthalmia, and what other pathologists have called trachoma or granula conjunctiva, is of such frequent occurrence there, that it might almost be called an endemic calamity, of that otherwise healthy Town. Of the 1,648 patients that have, in the course of these 25 months, been treated at Dr.

C's. Dispensary, 602, or more than one-third, were cases of this granular ophthalmia. There were, besides, 288 cases of scrophulous ophthalmia, 110 of catarrhal ophthalmia, 91 of ciliary blepharitis, 80 of trichiasis, 37 of keratitis, not counting the many secondary affections, such as leucoma, resulting from these inflammations.— Dr. C. is a man of independent judgment, as will be seen from his ideas on the nature of glaucoma, one of the many mysteries of pathology, puzzling alike to the medical practitioners and to anatomists, and for the elucidation of which we are forced, as on so many other occasions, to apply to physiology.

The experiments instituted by Dr. C. for this purpose, consisted in sections and other lesions of the only four nerves that need be taken into consideration, viz., the optic, the oculomotor, the ophthalmic branch of the trigeminus and the sympathic. The first two, however, were at once discarded, their lesions having produced no symptoms that could be considered as characteristic of glaucoma.

The cutting of the ophthalmic branch of the fifth pair induced (as, indeed, it always does) complete anæsthesia of the corresponding eye and parenchymatous keratitis, and thus far there is nothing new in Dr. C.'s assertions. But he says that if instead of a cut, a simple "lesion" (by which, I suppose, pressure is meant) be inflicted on the same nerve, a series of phenomena will come on, which constitute an almost complete counterfeit of glaucoma, viz: episcleral injection, myosis followed by slight photophoby, lacrymation and dilatation of the pupil, and slight alcalescence of the *humor aqueus*. The ophthalmoscope, however, showed no furrows in the papilla. And the sulcated state of the papilla being one of the constant and characteristic symptoms of glaucoma, Dr. C. applied for its supply to the sympathetic nerve. The physiological effects of the cutting of the cervical portion of the sympathic nerve being well known, Dr. C. does not seem to have experimented on that nerve separately. But after a previous cutting of the ophthalmic nerve, he applied a ligature to the sympathic, and on examining the eye three days later with the ophthalmoscope, he had the satisfaction to find, besides the effects just mentioned of the lesion of the trigeminus, also the long-looked-for furrows in the papilla. In the other eye the papilla was normal, as that the phenomenon could

not have been due to a congenital defect in the animal. Yet the author candidly confesses that although he has repeated this experiment several times, he has never been equally successful again, the furrows being sometimes only very faintly, sometimes not at all perceptible.

Other considerations led Dr. Conti to suspect that there was an increase of temperature in the *humor aqueous* of glaucomatous eyes. To ascertain this, he had a thermometer constructed of extremely small dimensions which fitted into what we will call a minute glass spoon. The handle of this spoon consisted of a tube large enough to hold the tube of the thermometer while the concave part of the spoon, representing a segment of a sphere, contained the bulb of the thermometer. Dr. C. now makes the *paracentesis corneæ*, while an assistant inserts this little apparatus between the eye-ball and the lower eye-lid, turning its convexity towards the eye-lid, so as to gather the aqueous humour round the bulb of the thermometer.

This experiment, as may be imagined, is a very delicate one.—Dr. C. performed it only three times, but these three observations have fully borne out the truth of his clever hypothesis, showing an excess of temperature of 2½–3°C. (5–6 F.) in the *humor aqueus*. This pre-supposes an inaction (brought on by paralysis or atrophy) of the ciliary nerves, and as, according to Dr. C., the necroscopic examinations of glaucqmatous eyes always shows these nerves to be in a state of thorough atrophy, he comes to the conclusion (though he expresses himself with great modesty and reserve,) that glaucoma is caused by a neuralgic (perhaps rheumatic) affection of the ophthalmic branch of the trigeminus, which affection reflects and propagates itself, through the ciliary ganglion, over the whole of the ciliary nerves, their sensitive fibres as well as their sympathetic or vasomotor ones, thus affecting gradually the sensitiveness, circulation and nutrition of the whole eye, and producing that complex group of symptoms called glaucoma. As to its treatment, Dr. Conti has, as yet, nothing better to suggest than *iridectomy* the method first proposed by Graefe.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

"Judex Damnatur cum nocens Absolvitur."

GREENHOW ON ADDISON'S DISEASE. A Review. By RICHARD McSHERRY, M. D., Prof. of Principles and Practice of Medicine, University of Maryland.

ON ADDISON'S DISEASE. Clinical Lectures on Addison's Disease, and a Report on Diseases of the Supra-renal Capsules. By EDWARD HEADLAW GREENHOW, M. D., F. R. C. P., &c. London. 1866.

This is an admirable monograph upon an obscure, but interesting disease. If the reader be skeptical, as to the reality of Addison's disease, that is, of a remarkable association of anæmia, with extraordinary debility, with excessive feebleness of the heart's action, with an irritable stomach, and a discolored skin generally, or partially, of a bronzed or other dark hue, not natural to the patient in health, and all associated with concomitant lesion of the supra-renal capsules, he will find in this Work, that which will remove his skepticism. There are, assuredly, general or partial discolorations of the skin without any involvement of the capsules, and there are diseases of the capsules without any discoloration, and and upon these simple data, many pathologists are disposed to class Dr. Addison's discovery among the myths of Medicine.

Some of the French writers wish to substitute *Melanodermie Asthenique* (as suggested by M. Fauvel, of Constantinople) for the terms Addison's Disease, or disease of the supra-renal capsules, proposing thus to convey to the mind an idea of the prominent phenomena of the affection, without the risk of involving an unsustained pathological hypothesis.

M. Gabler has satisfied himself, and others, that there is no direct relation between this bronzed skin and the lesions of the supra-renal capsules, as they are respectively found without association, almost as often as in association. This may seem to be conclusive, but it is not so. It does not prove that there may not be certain phenomena exhibited during life, which are uniformly

concurrent with certain morbid changes, observed in the capsules, after death. No one asserts that all discoloration with anæmia, is proof of capsular disease, or that every disease of the capsules is attended with discoloration and anæmia. There is, indeed, a most perplexing obscurity as to cause and effect in the various morbid relations. It is in evidence, however, that certain changes in the capsules, in which the morbid element is tuberculous or tuberculoid, are attended with the acknowledged constitutional symptoms and external signs of Addison's disease. There may be a common cause inducing both the local affection and the outward manifestations; "but the fact," says Dr. Greenhow, "that in a considerable number of cases, in which the symptoms have been strongly marked during life, no trace of disease, whatever, has been found after death, except the changes in the supra-renal capsules, appears to me to afford very convincing evidence that the local affection and the external symptoms, stand to one another in the relation of cause and effect." As to the manner, pursues this author, "in which the supra-renal change operates, as a cause in producing these symptoms, it may be, as has been supposed by Drs. Wilks and Habershon, that the symptoms are due to irritation of the nerves connected with the solar flexus and semi-lunar ganglia, but as yet, this theory, though in some respects plausible, appears to me to be unsupported by any adequate proof. It may be supposed, on the other hand, that these symptoms depend upon destruction or perversion of the functions of the capsules themselves, but there are difficulties also in the way of either of these hypotheses. If the symptoms were due to destruction of function, we should expect them equally to follow the destruction consequent on cancer, which we have seen not to be the case; and their being due to perversion is difficult to reconcile with the fact that the morbid changes in the supra-renal capsules, in many instances, have made considerable progress some time before the accessions of any of the constitutional symptoms." This quotation may seem to show something of the intrinsic obscurity in the essential pathology of Addison's disease, and also a point which many observers overlook; to wit, that some forms of destruction of the capsules, as e. g. the cancerous, may exist without the associate symptoms and signs characteristic

of Addison's disease during life. Pathologists must then narrow their base to come at the disease in its proper and exclusive characters. The distinctive lesion found after death is a degeneration in the substance of the capsules of a tuberculous or tuberculoid character. The indispensable lesion then, is of one kind, and of one kind only. Now this one morbid change in the capsules is almost invariably attended by certain constitutional symptoms and external signs of easy appreciation, for the most part, during the life of the patient. *Melanodermie Asthenique* is applicable to nearly every case of Addison's disease, but it involves this much of imperfection; to wit, that there may be a dark skin with asthenia, without any association with the disease in question. *Melasma supra-renale* is, by much, a better term.

The proper constitutional symptoms of this disease, are gradually progressive asthenia, great langour, breathlessness and palpitation, frequent sighing, faintness after muscular exertion, weakness of heart's action and pulse, loss of appetite, nausea and vomiting. There are frequently pains in the loins, hypochondria or epigastrium, with perhaps dimness of sight, vertigo, and failure of the mental powers. These symptoms are, more or less, concurrent, appearing somewhat in the order stated, and increasing in degree, until hopeless prostration ends in death. There is generally but little emaciation, except in complicated cases.

The external signs, are, in most cases, very striking. "The discoloration of the skin is very peculiar, and gives to the patients in whom it is well marked, the appearance of belonging to one of the darker races of mankind. Most frequently, it is of a dusky or yellowish brown, but sometimes rather of an olive or greenish brown colour. The shade is not uniform on all parts of the body, but is generally darker on the face, neck, and hands, and in the axillæ and groins. The penis and scrotum, and the nipples and areola are usually the darkest parts of the natural skin, and the discoloration of these last may be regarded as one of the external diagnostic signs of Addison's disease. If the patient has been blistered, or has sustained any other superficial abrasion of the skin, the injured surfaces are always darker than the surrounding parts, but the cicatrices of deeper injuries usually remain pale.

Very often, also, small, well-defined specks, or patches of darker colour, resembling moles, are found upon the face, arms, neck, or trunk, usually upon the already discoloured skin. Although the discoloration is generally most marked on certain parts of the body, and "may exist on some parts while the skin of other parts is of the normal hue, there is rarely any definite line of demarcation between the discolored and normal parts of the skin, but the former fade insensibly into the latter. The characteristic discoloration is not restricted to the skin, but in well marked cases it is also usually found upon the lips in the form of an irregular stain, running lengthwise, and upon the gums and buccal mucous membrane in the form of stains or patches; these last may perhaps when present, be considered as the most decisive of the external diagnostic signs of Addison's disease. It is, on the other hand, important to remark, that the conjunctivæ always remain uncolored, and in the more discolored cases, their pearly whiteness presents a striking contrast to the dusky hue of the face." We may here observe that we have known of discolored conjunctivæ occurring *with* Addison's disease, not as a necessary part of it, but due to hepatic or other complications.

With the recognized constitutional symptoms and external signs occurring as just summarily presented, there is little room for doubt of attendant characteristic changes in the supra-renal capsules.—In short, Addison's disease may be diagnosticated with confidence.

Dr. Greenhow tabulated 128 cases of this disease, of which 46 were nearly uncomplicated, 59 were complicated with vertebral and tubercular disease, and 23 were complicated with phthisis and other serious diseases. In the two first classes well marked constitutional symptoms and characteristic discoloration predominated in a vast majority of the cases; in the last class, or especially in cases of confirmed phthisis, the constitutional symptoms and external signs were observed only in the minority of cases, a fact which, as our author remarks, would seem to be a sufficient refutation of the theory propounded by MM. Virchow, Bazin, and other foreign authorities, that the discoloration of the skin in Addison's disease is the result, not of the morbid change in the supra-renal

capsules, but of the general tuberculosis which is occasionally associated with it.

Notwithstanding the many obscurities and real or apparent exceptional cases which perplex the investigations as to the true nature of this singular disease, we think that few who read Dr. Greenhow's Work can refuse to admit, "that rarely has a more overwhelming array of facts supported any scientific hypothesis than is presented by the results of this analysis in support of the relation between a certain train of constitutional symptoms, attended by discoloration of the skin, and one particular organic lesion of the supra-renal capsules."

In many cases the diseased capsules have been found associated with vertebral disease, and in not a few, there had been some strain or injury to the back, weeks or months, or longer, before the development of the disease in question. From the facts, Dr. Greenhow infers, with reason, "that the origin of Addison's disease of the supra-renal capsules is due, in a hitherto quite unsuspected degree, to the extension of inflammation to those organs from diseased or injured adjacent parts in persons of a tubercular diathesis."

We do not propose in this review to make a regular dissertation upon Addison's disease, but we do wish to call the attention of the readers of this Journal to its general nature and features, so that when a case comes under observation, it may not be overlooked, as happens undoubtedly in many instances, because our Practitioners are not familiar with it, or have doubts of its existence as a special and well-defined disease. It can no longer be ignored, or left in any dubious category. It must take its place hereafter among the rare but serious maladies to which our race is subject.

We will but advert briefly to the treatment. The intelligent Physician will see, at once, the necessity for a sustaining course, whatever special remedies he may use. He may be prepared, also, for a fatal issue, as the general rule, no matter how skillful the treatment. Such success as may be obtained will follow the use of tonics and good food, and the avoidance of depressing agencies, whether medicinal or due to the ordinary exigencies of life. If we may believe Bouchardat, hard labour is truly remedial in diabetes

mellitus, it is certainly the reverse in Addison's disease. Among medicines, or medicinal combinations, Dr. Greenhow recommends highly, "glycerine in doses of two drachms, combined with fifteen or twenty minims each of the spirit of chloroform and of the tincture of the sesquichloride of iron." The power of medicines over chronic diseases is but too often very equivocal, to say the least of it; in this instance, however, we have the best proof that can be given of the efficacy of the agents used. "I speak positively on this point," says our author, "because in each case the patients on several occasions, have discontinued the medicine as soon as they have felt better, have then lost ground again, and on applying to me and resuming its use, have in a week or ten days, once more begun to improve, without any other simultaneous change in their circumstances."

Time and space will not allow us to extend this review, which already exceeds the ordinary limits. We will only say, in conclusion, that the reader who desires to learn all the now known facts relating to Addison's disease, may obtain them, briefly and clearly presented, in Dr. Greenhow's excellent monograph. R. McS.

THE TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION.—Instituted 1847. Vol. xvii. Philadelphia, 1866. pp. 713.

Of this ponderous volume, nearly one-sixth part is occupied with the Plan of Organization, the Code of Ethics, and the list of members.

The committee on publication apologize for the delay in getting out the sixteenth volume, and state that in consequence of the enormous increase in the cost of printing and paper, they were compelled to call "for an additional subscription of *two dollars*."

The Treasurer has the honour to report "the bankruptcy of the Association;" that "permanent members will not purchase the volume of Transactions," and that "the fact has been again and again demonstrated that the members of the American Medical Association do not consider the volume of *Transactions* worth the cost of its production." *In which opinion we most heartily concur!*

The address of D. Humphreys Storer, M. D., President, is admirable in language and in tone. While giving due honour and credit to the specialist, he is justly severe in his condemnation of the charlatan, who under the pretence of devotion to specialty, imposes upon the public, insinuates himself into practice, and deposes the family Practitioner from his well earned honoured position. The pompous boaster of his own skill,

> Who out of a tin horn, blows his own name
> Which ne'er was sounded by the trump of fame,

whose wonderful success can be matched only by that of the age of miracles, and who, in an obscure country town, observes a vast variety, and innumerable instances of cases of disease, rare in the most populous Cities, so that for the good of humanity, it becomes necessary to change his locality to some point where he may be more easy of access; such a charlatan ought to be *cut* by the Profession, although a credulous community may sustain him.

The same subject is admirably handled by the "Committee of Medical Ethics on Specialties."

In the report of the "Committee on Medical Literature," we find some remarkable admissions under the head of "Extraordinary mortality from disease among coloured troops."

"It is seen that while 2,997 died in action and of wounds, the enormously large number of 26,301 died of disease. Among the white troops the proportion of deaths in action, and from wounds, to the deaths from disease, is about one to two; among the coloured troops as one to eight. About 180,000 coloured men were enlisted in the army during the war, of whom, accordingly, nearly one out of every seven died of disease. The general proportion among white troops is one to fifteen.

"These figures indicate conclusively that the negro, in the condition in which the war found him, was less capable than the white man of enduring the trials, physical and moral, of military service. It may be assumed, that where one died of disease, at least five others were seriously sick, so that a large proportion of the coloured troops must have been constantly on the sick list." Further on we find the following tabular statement:

	Killed or died of wounds.	Died of disease.
Rugulars	30.55	42.27
Volunteers	35.19	59.22
Coloured Troops	16.11	141.39

The foregoing statistical statements comprise only officers and men who died in the service, and not the tens of thousands who were discharged for disability contracted in the service, from the effects of which they subsequently died in private life. Now, what are the causes of this extraordinary unfitness of the negro for military service? The report gives the following explanation: "A close analysis of the causes of this unfitness for military service in the two races, however, would no doubt show that they were in the main of a psycological character, that the great susceptibility of the coloured man to disease, arose from a certain lack of mental activity and bouyancy of feeling, and that a higher moral and intellectual culture would diminish the effect." Now while we are ready to admit the *facts* stated in the report, (no doubt acknowledged with reluctance) we do not admit the correctness of the explanation. Why is the climate of Boston, as shown by its own statistics so unfavourable to the negro, that before the war the deaths outnumbered the births plus the accessions by escape from servitude and from manumission, so that the negro population of Boston was steadily disappearing? Why did the negro population at the South increase like the Jewish nation in the land of Goshen? Why was it that when the terrible pestilence of 1855 desolated the City of Norfolk, in this State, that the white population was swept away with the besom of destruction, while the negro was passed almost harmlessly by, although both races had been planted and raised together for generations? Why does the negro, and still more the hybrid of the two races, suffer so much from scrofula in this climate, a disease which he knows not in the land of his nativity? Why does the Lascar die of consumption in London? Why do the Simia tribe perish so speedily of consumption in this country that their expectation of life here is only about three years? Why does the North American Indian pine and perish if subjected to a life of servitude and toil, while the negro enjoys

himself and prospers in the same condition? Why is military life the normal condition and delight of the former, but the miserable ruin of the latter? Why are the horse, the ass, and the mule subject to the bit and the bridle, while the zebra spurns all attempts at subjugation? A thousand such questions as these may be asked.

We reply in the words of Holy Writ, "can the Ethiopian change his skin or the Leopard his spots?" There is but one true explanation, that there are *inherent*, *essential* differences which the Creator has established, and that God hath fixed the bounds of their habitation. "The laws of God will assert their supremacy notwithstanding all the theories of man, and all his attempts to set them aside."

The negro, although fighting for what was represented to him as the great boon of freedom, exposed himself so little that the ratio of deaths from the casualties of battle were only 16.11 p. thousand, while that of white volunteers mostly mere mercenaries, was only 35.19 p. thousand. So unfitted was the negro to bear the exposure and fatigue of camp life that the ratio of deaths from disease was 141.39 p. thousand, while that of the white volunteers was only 59.22 p. thousand. In the latter case too, it will be remembered that the negro was in a climate which was naturally well fitted to him and in which he had been born and raised, while a large proportion of the white troops were from Northern and European States, who were entirely unacclimated.

So striking was the result that a people accustomed to calculating closely questions of profit and loss, disbanded the negro regiments at the close of the war. B.

NOTE.—We observe in this report the foolish affectation of using the word coloured instead of negro. This is more excusable among the unlearned, but every man of science knows that black is the absence of all colour, and that white is the combination of all colours.

A Practical Treatise on the Physical Exploration of the Chest and the Diagnosis of Diseases Affecting the Respiratory Organs. By Austin Flint, M. D., Professor, &c. Second Edition revised. Philadelphia. Henry C. Lea. 1866. pp. 595.

This is an admirable exposition of the present state of our knowledge of the subjects of which it treats. The language is clear and perspicuous, and states, in a plain, manly way, the views of the writer. While the Work exhibits great research and industry, it is not a mere compilation, a mere huddling together of other men's opinions, leaving the mind of the student in a state of confusion worse confounded, after having consulted its pages on any subject.

We observe, as stated in the preface, "an original feature of the Work, is the introduction of several signs produced by the *whispered* voice. These signs, as representing certain physical conditions, are generally available, and their characters relating to pitch and quality, are highly significant."

Professor Flint's estimation of Cammann's stethoscope, has greatly increased, and he makes a novel application of it. In cases where he has reason to believe a cavity exists in the lung, but is unable to detect amphoria and cracked metal resonance, he places the pectoral extremity of the instrument near to the open mouth of the patient, uses percussion, and is thus able to make out these cavernous signs in a pretty large proportion of cases.

As some of our readers may not be familiar with Cammann's stethoscope, we explain, that it consists of an ordinary trumpet-shaped extremity, which is intended to be applied to the chest.—To this is attached an elastic tube a few inches in length. This tube is bifurcated, and both extremities are tipped with nozzles adapted to both ears of the auscultator. The two branches are kept together by an elastic band for the purpose of holding the nozzles in the ears. The peculiarities of this over the ordinary elastic stethoscope, are, that the conveyed sound strikes both ears simultaneously, and that the ear-piece is held in place, leaving the hand at liberty for other uses.

Its advantages are thought to be, first, that both ears being occupied by the same sound, all other sounds are excluded; and second,

the same sound being perceived simultaneously by both ears, a more distinct impression is produced. This advantage is analogous to that of the stereoscope.

We recommend the Work especially to those who desire to inform themselves fully upon the physical signs of diseases, affecting the respiratory organs, and have not access to a large hospital, or have become rusty in regard to these signs for want of sufficient practice. It is worthy a place in every select library. B.

Rhinoscopy and Laryngoscopy: their Value in Practical Medicine. By Dr. Frederich Semeleder, &c., &c. Translated from the German by Edward Caswell, M. D., with woodcuts and two Chromo-lithographic plates. New York. W. Wood & Co., 61 Walker street. 1866. pp. 191.

This Work gives very full and minute directions for the use of the modern instruments, by means of which ocular explorations made of the posterior nares, the pharyngeal apertures of the eustachian tubes, the larynx and pharynx. These explorations require much perseverence, tact and experience, such as is not likely to be attained, except by specialists. To those who are disposed to become such, we strongly recommend the Work before us, as containing in a concise form, and clearly expressed, the information they need. B.

Notes on Epidemics for the Use of the Public. By Francis Edmund Anstie, M. D., F. R. C. P., Senior Assistant Physician to the Westminster Hospital. First American edition. Philadelphia. J. B. Lippincott & Co. 1866. pp. 95.

This Work is designed, as stated upon the title page, for lay readers, for heads of families, and especially for sanitary commissions. The author endeavours to arouse the attention of the public to the means of protection against epidemic diseases, especially among the pauper population, and shows that such measures, provided by the wealthy, are in reality means of self-protection, and,

as they all come under the head of sanitary police, may readily be put in practice. His remarks on sewage, and on the importance of an abundant supply of water for washing out open drains and culverts, and of pure water for drinking purposes, might be studied and acted upon by the authorities of this City (Richmond, Va.) with great advantage to the public health.

The writer quotes from Dr. Murchison, to show the horrors of London pauperism which generate typhus fever. He states, that one of the localities, where the fever originated, was an underground cellar, with one window, which was never opened. The dimensions of this cellar were 912 cubic feet, and this small space was occupied by eight persons. Thus 114 cubic feet were alloted to each inhabitant. The American editor well adds, "about as many feet as are contained in a moderate sized grave," and remarks: "There are many places in all our large Cities, fully as bad, if not worse, than those mentioned by the author, as situated in London."

A divine visitant to our earth, passing through such scenes, and hearing denunciations of their Southern white brethren, and lamentations over the sufferings of their Southern sable brethren, might well exclaim, "thou hypocrite, first pull out the beam that is in thine own eye, and then shalt thou see clearly to pull out the mote that is in thy brother's eye." We commend these facts to their surplus sympathy and humanity. B.

Lectures on Orthopœdic Surgery, Delivered at the Brooklyn Medical and Surgical Institute, with Numerous Illustrations. By Lewis Bauer, M. D., M. R. C. S., Eng. Professor, &c., &c. Reprinted from the Philadelphia Medical and Surgical Reporter. Philadelphia. Lindsay & Blakiston. 1864. pp. 108.

This is a very full and complete work on the surgical operations and appliances required in this branch of practice—much more full than the chapterism ordinary systematic Works on surgery. We commend it to those who desire to be fully informed on this subject.

B.

MISCELLANEOUS.

"Non Omnes Eadem mirantur Ament que."—Hor.

On the Separation of Strychnine Salts by Carbolic Acid.—When a weak solution of hydrochlorate of strychnine is shaken with some drops of carbolic acid, the liquid assumes the appearance of an emulsion. It has then little activity when administered by the hypodermic method, but this relative innocuousness is due to a simple sluggishness of absorption, and not to a destruction of the strychnine by carbolic acid—for, on removing this with ether, a limpid solution is obtained as energetic as at first. If the emulsion is carefully filtered, and the filtrate treated with ether, it has no longer any toxic property; on the contrary, that which remains on the filter, being diffused in water and freed by means of ether from the carbolic acid which it contains, forms again the strychnine salts at first taken. Carbolic acid has the effect, therefore, of holding in suspension the strychnine salt, and singularly facilitating its separation. The author has found strychnine can be easily separated in this way from putrescent animal matter.—*M. Paul Bert, in Medical Gazette.*

Cholera Yeast.—The investigations of Herr Klob and Herr Thomé, originally detailed in Virchow's *Archive*, point to the development of an enormous quantity of a vegetable growth in the intestinal canal of cholera patients. At a recent meeting of the Pathological Society of London, Mr. Simon exhibited a specimen of the plant which had been given to him by Herr Thomé during his recent visit to the Continent, to attend the Cholera Conference just held at Weimar. Mr. Hulke and Dr. Sanderson were appointed to report on the subject, and we may, therefore, look with confidence for early and reliable information.—*Medical Press and Circular.*

Examination of the External Auditory Passage.—In the interesting article from my friend Dr. Shaw, on this subject, in your Journal for May 30, occurs the following sentence :—"From the great uncertainty which attends the weather, recourse must be had to artificial light, which will be found an efficient substitute" (that is for ordinary daylight or sunlight). One of the great advantages which the method of illumination of von Troëltsch, of which Dr. Shaw justly speaks so highly, is, as it seems to me, the

fact that we are *never obliged* to substitute lamp or gaslight for ordinary daylight, even if the weather be cloudy or stormy. I have never as yet seen the daylight which was not sufficient to fully illuminate the auditory canal and membrana tympani, when reflected by the concave mirror. Believing, as I do, that the introduction of this simple means of examination has done more for the advance of our knowledge in ear disease than any one suggestion ever made in this province, I am induced to ask you to insert this as an addendum to an article which has done a real service to the Profession. If I am correct in my views of the adaptability of the mirror to any weather cloudy or pleasant its use becomes still more simple. D. B. St. J. R.—*Boston Medical and Surgical Journal*

Hypodermic Medication in Congestive Chills.—The following interesting case is reported in the *St. Louis Medical and Surgical Journal* for January and February, 1867.

"I was called on the 19th of September to see Mrs. S. She informed me that she had had one or two slight chills occurring upon alternate days, but without being followed by fever, and that she had taken several doses of quinine after each chill. When visited by me she was suffering from great dyspnœa, extreme depression of the pulse, cold extremities; in fact, with all the symptoms which characterize a case of congestive fever. It was attended also by excessive nausea, with efforts to vomit, excited by the blandest substances taken into the stomach. I ordered twenty grains sulph. of quinia, by enema, in a little mucilage, with thirty drops of laudanum; also mustard cataplasms to the spine, and frictions, with hot whiskey and cayenne pepper to the extremities, and all the usual adjutants for the restoration of the circulation to the surface. The enema brought on the most violent pain, continuing half an hour or more, when it was expelled. I then directed forty drops of laudanum to be given, by enema, in a little mucilage, also blisters over the extremities and to the calves of the legs, and the continuance of the frictions. In six or eight hours I returned, and found my patient unrelieved. The nausea still existing to such a degree as to preclude the idea of administering any remedies by the mouth, except one grain of the submuriate of mercury, which she had been taking since my last visit every three hours, floating upon a little ice water.

"I again attempted the introduction of quinine by enema—the bowels not having been moved since my last visit—and it was again attended with extreme suffering until expelled. Being thus deprived of the usual avenues for the introduction of medicine into the system, in consultation with a worthy *confrere*, we determined to

try the hypodermic method, and threw into the cellular tissue of the arm ten grains of sulph. quinine, made soluble in one or two drachms of water by means of aromatic sulphuric acid, using about one drop to the grain. In five minutes the effect was perceptible upon the pulse. It increased in volume and strength at the same time that the dyspnœa and other symptoms of internal congestion began to subside. This was repeated, and when we had given twenty grains, we had the patient quite under its influence. This was again repeated for several successive days as occasion required until about forty grains were administered, with the effect of entirely preventing the recurrence of the congestion.

"What struck us as remarkable in the case was the rapidity with which the effect was produced. For the interest of those who may not be familiar with the hypodermic method, I would suggest the necessity of running the solution through a cloth, and also of testing it with litmus paper to prevent an excess of acid, or otherwise the tube of the instrument after being introduced might become clogged, which would be a mortifying embarrassment and an excess of acid might produce erysipelas of the tissue."

Greatest Depth of Mines.—The Eselchacht Mine at Kuttenburg, in Bohemia, now inaccessible, is the deepest mine in the world, being 3,778 feet below the surface. Its depth is only 150 feet less than the height of Mount Vesuvius, and it is eight times greater than the height of the pyramid of Cheops. The bore of salt works of Minden, in Prussia, is 2,231 feet deep and 1,993 feet below the level of the sea.

New Form of Antiseptic for Local Use.—The liquor carbonis detergens is recommended. It is an alcoholic solution of coal-tar, containing, we presume, the carbolic, phenic, and other acids, with dark tarry matter, and differing from carbolic acid, as the liquor cinchonæ does from quinine. It readily mixes with water, forming a permanent emulsion, and in various strengths is available as a mouth-wash, a gargle, an injection for fetid uterine discharges cancer, retained placenta, etc., gonorrhœa in the female, foul ulcers, sloughing sores, and all maladies dependent in, or complicated by, parasite beings, lice, fungi, etc. It is also used combined with soda.—*Medical Times and Gazette.*

Oil of Petroleum.—Says the Union Médicale, is a powerful agent for the destruction of insects. The crude oil is the best for the purpose. A few grammes of petroleum diluted with water, and sprinkled by means of a watering pot over strawberry plants,

destroys the maus or "white worm of the beetle" which infests those plants. The crude oil mingled with a large proportion of water is a sure poison for crickets The mixture is to be poured through a tunnel into the holes frequented by them.

The acarus scabiei, is very promptly and radically destroyed by inunctions with the oil.

Frictions with petroleum water (60 gr. par. litre) immediately cleanse the domestic animals of the parasitic insects which annoy them. The animals should be washed with soap suds a few minutes after the friction.

It is also stated that a house infested with rats and mice was freed from these guests a little while after the introduction of a large quantity of the oil into the cellar.—*Boston Medical and Surgical Journal.*

Trousseau's Syrup of Lime in the Treatment of Acute Rheumatism.—We find in the *Boston Medical and Surgical Journal* the following statement in regard to the use of lime in Rheumatism:

"Having for a year past used what I consider a new remedy for rheumatism, and with better success than from any other remedy, I consider it proper to ask the Profession to make a trial of it. It is the syrup of lime, made according to Trousseau's prescription, as found in *Parrish's Pharmacy*. I have used it, according to the severity of the case and the age of the patient, in the dose of ten drops to forty-five drops, and repeated it from two to six hours, as symptoms have seemed to demand. In but one case has any opiate been required from the beginning. Two cases were complicated with Bright's disease, as indicated by the great abundance of albumen and the casts, as seen in the urine. In one of these the albuminuria entirely disappeared, and in the other it has been largely diminished. There has been no constipation, but generally looseness of the bowels after a couple of days' treatment. The medicine is best taken in unskimmed milk, in quantity from a tablespoonful to four ounces, according to the size of the dose of syrup."—*Buffalo Journal.*

The opinion of Dr. Taylor has been called in question by other chemists of equal standing as himself, and we may regard the assertion that Strychnine may become destroyed while in the blood as unfounded and unproven. Dr. Taylor failed to prove the presence of Strychnine in the body of Cooke, poisoned by Palmer, but we do believe, and we did at the time believe that his premises of reasoning were from insufficient data. We would call the atten-

tion of our readers to the recent case of poisoning by strychnine, which formed the subject of judicial inquiry, the particulars of which we publish in this number of the Journal. The crown secured the service of Dr. Girdwood, of this city, who most perfectly and conclusively demonstrated the presence of strychnine in the body of deceased, indeed in another case which has been submitted to a jury for their decision, Dr. Girdwood demonstrated unmistakably by the colour test the presence of strychnine not only in the stomach and its contents, but in the muscles of the thigh, and also in the thigh bone, we were ourselves present during part of the chemical investigations in this case and were convinced of their correctness. So that the theory of Taylor that strychnine becomes destroyed in the blood falls to the ground. This assertion was advanced by him at the Palmer trial, and was objected to at the time by Drs. Rodgers and Girdwood, Dr. Leatheby, Mr. Nunnelly and others, (see *London Lancet*, vol. i, 1856.). Dr Taylor seems to have arrived at his conclusion simply from the fact that his process of chemical investigation was defective, and hence he started a theory unfounded on fact; the only fact being his inability to discover the presence of the poison which in other hands would have been undoubtedly demonstrated.—*Canada Journal.*

Electrolytic Treatment of Tumours.—Now that electricity is rapidly gaining a secure and definite footing as a therapeutic agent, the following remarks on its surgical employment, by the distinguished Dr. Julius Althaus, will be read with interest.

In tumours, the electrolytic treatment acts in a threefold manner, viz.: through mechanical disintegration by the nascent hydrogen; chemical destruction by free alkali; and modification of nutrition by the dynamic effects of the continuous galvanic current on the vaso-motor nerves of the parts brought under its influence.

1. *Nævus.* Although nævus is not commonly dangerous to the patient affected with it, yet it entails a good deal of trouble and annoyance; and, being most frequently seated on the scalp and face, gives rise to great disfigurement. Moreover, it should be recollected that nævus is liable to be inflamed by disease or injury; that ulceration may ensue, exposing parts of its substance, and forming irritable and open bleeding sores, which rarely heal soundly. It is, therefore, generally desirable to have a nævus removed.

The very large number and the exceedingly different kind of operations which have from time to time been recommended for the cure of nævus seem to show that hitherto no method has proved

entirely satisfactory in its results: for I expect it is in surgery as it is in physic—viz., that the larger the number of remedies recommended for the cure of a particular disease, the less is generally their actual value. I believe, therefore, that a method so safe and so successful as the electrolytic treatment will prove a positive boon to surgeons in the management of these tumours.

I will now relate the details of a case of nævus which was successfully removed by this proceeding.

1. *Case of Nævus of the Eyelid: Operation: Cure.* In July, 1866, Mr. White Cooper requested me to see with him a lady, aged 28, who had a congenital nævus of the right lower eyelid, of the size of a small pea, which it was thought desirable to remove. I expressed the opinion that this might be safely done by the electrolytic treatment, without hæmorrhage, and without subsequent inflammation, suppuration, or sloughing. We therefore met on the 23d of July, in order to perform the operation.

As the patient was of a highly sensitive constitution, chloroform was administered by Dr. Allan, of Hyde Park Terrace, the ordinary medical attendant of the lady. As soon as she was fairly under the influence of it, Mr. White Cooper introduced a needle connected with the negative pole of ten cells of the battery into the right half of the tumour; and I closed the circuit by placing a moistened electrode, connected with the positive pole, to the skin of the neck. The current was then allowed to pass for two minutes, after which the needle was withdrawn.

Not a drop of blood was lost, either on introducing or on withdrawing the needle. The patient recovered well from the chloroform, and said she felt no pain in the part that had been operated upon, but merely a slight stiffness. The right half of the tumour appeared shrunk and shrivelled up, while the left half had not been altered in any way. This was an interesting circumstance, as it showed that, even in such a small tumour as the one described, the action of the current could be exactly limited to that portion of it which was in contact with the needle.

We met again on July 26th, when the same operation was performed on the other half of the tumour; but this time the patient objected to the use of chloroform, and bore the trifling pain of the galvanism extremely well without it. I have not seen the patient since; but received, on October 13th, a note from Dr. Allan, in which he expressed himself as follows: "Mrs. —— is in the country; but, last time I heard from her, she said the nævus had disappeared. A dozen years ago I wished it to be removed, but no one would do it; and the able and esteemed oculist whom she then

consulted deprecated all interference. At length I persuaded her to have another opinion (that of Mr. White Cooper.) The result was your employment of galvanism, with the happy effect of complete obliteration of the evil."

What can be done with nævus can be done with many other tumours by the electolytic treatment. I subjoin three other cases, the issue of which was equally satisfactory.

2. *Case of Papillary Growth in the Armpit: Operation: Cure.*—A lady, aged 27, consulted me on November 21st, 1866, on account of a small papillary and highly vascular growth, which had first appeared in the right axilla since the commencement of 1865, and had somewhat rapidly increased in size during the last few months. It was one-third of an inch long, and one-fourth of an inch wide in its widest part. I introduced a needle connected with fifteen cells of the battery into the base of the tumour, and allowed the current to pass for three minutes. No chloroform or ether-spray was used. The current had not acted many seconds when a peculiar change was observed in the tumour, which lost its flesh-colour and became quite white, as if it had been frozen.—When the needle was withdrawn, circulation in the tumour had evidently quite ceased. There was scarcely any pain during the operation, and none at all afterwards; nor was any blood lost.

Nov. 23d.—Tumour entirely shrivelled up, looking like a thin brown leaf just adhering to the skin. The operation was, therefore, not repeated.

Dec. 20th. The eschar fell off about a week after the operation. There is now no sign that there ever was a tumour, no scar, nor even redness of the skin, being perceptible.

3. *Case of Molluscum of the Right Eyelid: Operation: Cure.* A married woman, aged 32, was sent to me by Dr. Tilbury Fox on November 29th, 1866. She had a very hard globular sebaceous tumour, with a broad base, just under the right eyelid; its size was between a large currant and a small hazel-nut, and it had a dark point on the summit. The tumour disfigured the face considerably; and it somewhat interfered with the sense of sight, for the patient could not look straight at anything without feeling giddy. As the stratum of corium over the tumour appeared considerably distended, and as I was anxious that no scar should be left after the operation, I only used a current of five cells in this case, on three different occasions, viz., on November 29th, and December 1st and 7th.

Jan. 10th.—Nearly the whole of the eschar has come off, leaving a soft red surface. At the inner edge a small piece of tumour still adhered to the skin, for which I applied again a current of five

cells for about one minute. Feb. 6th.—No trace is now left of the tumour.

In this case the treatment lasted somewhat longer than usual, because I acted with very low power. The tumour might have been removed by a single operation; but then a scar, which is always an eyesore, might have been the consequence, which I though it better to avoid, especially as there was no occasion for hurry.

I should add, that in this case, as in the others, not the slightest bad symptom arose duing the progress of the treatment.—*Brit. Medical Journal.*

Synthesis of Organic Compounds.—M. Bethelot pursues the new and wonderful line of achievement opened in the chemical creation of the products of organic life, with unflagging zeal and steady progress. Having heretofore succeeded in forming acetylene by the direct union of carbon (4) and hydrogen (2,) he has lately built upon this structure by the addition of oxygen (8,) which makes the exact constitution of oxalic acid, and that substance is the actual result. Other carbides of hydrogen are oxidized with the same success, giving a variety of appropriate products. The coal-tar products have been proved to consist of a small number of relatively simple bodies, and the great variety of these products to be due to the various combinations which these take on under the influence of heat. In this manner acetylene is artificially condensed into benzine, its equivalent of carbon and hydrogen respectively, being exactly tripled. With an addition of hydrogen under the same influence, it forms ethylene; ethylene with benzine forms styrolene; and again, styrolene with more ethylene gives naptha-ine. It is reasonable, therefore, to conclude that the distillation of coal produces these substances in the same way. M. Berthelot's latest success has been the synthesis of toluene, the base of the new and rich toluen red, which we noted not long since. The composition of this substance (carbon 14, hydrogen 8) indicates the addition of marsh gas (carbon 2, hydrogen 4) to benzine (carbon 12, hydrogen 6,) with the elimination of two equivalents of hydrogen. Means adopted to realize this combination resulted in the successful production of toluen from marsh gas and benzine.—*Scientific American.*

Cure for Neuralgia.—Half a drachm of sal-ammoniac, in an ounce of camphor water, to be taken a teaspoonful at a dose, and the dose to be repeated several times, at intervals of five minutes, if the pain be not relieved at once.

A New Form of Suture.—Dr. Albert H. Hoy, of Racine, Wis., in speaking of the rubber suture, says: "We have repeatedly used a suture to which, not knowing of its being mentioned in any treatise on surgery, we desire to call the attention of the Profession, trusting they will find that it meets the indications of a good suture, viz.: 1st, adaptation of the edges of the wound; 2d, producing little irritation; 3d, easily applied. In using it, the following things are required: 1st, a paper of ladies sewing needles, the points of which, for one third their length, have been heated in a lamp and curved like a surgeon's needle; No. 4 is the best size; 2d, some rubber elastic bands, cut into inch lengths; that having a width of 1-10 of an inch will be found most generally useful; 3d, a pair of small pliers and wire-cutters. To introduce the suture, one of the needles is taken firmly by the eye with the pliers, and a piece of the rubber band is strung on, near one of its ends, and the needle, thus armed, is thrust through the edges of the wound, thus holding them together. The free end of the rubber band is then strung over the point of the needle, care being taken to give the band just sufficient tension to hold the lips of the wound snugly together; the points of the needles are then snipped off with the cutters, and the suture is complete. In place of the rubber bands, what is known as the French rubber tubing, for dental purposes, is in some cases preferable. Sections of this, of size in accordance with the tension required, may be looped over the ends of the needles after they are introduced, by means of the artery forceps. It may not be out of place to remark, that we have seen numerous instances of what might be properly termed union by the first intention, in cases where this suture was used, and these, too, in the most extensive wounds. The elasticity of the rubber tends constantly to keep the lips of the wound in direct apposition, even though the needles may be loosened by suppuration, and it is well known that steel or iron produces a very trifling amount of irritation. The rubber, also, is not affected by the heat or secretions of the part. We were led just now, to call attention to this suture, from the fact that a few days ago we assisted Dr. P. R. Hoy, of this City, in removing nearly the entire under lip of a gentleman, for an epithelial cancer, and succeeded after loosening the integuments from the lower jaw, in bringing the lips of the wound together, and retaining them perfectly successfully until union took place, by means of this rubber suture. We desire to recommend it strongly in hare-lip and other plastic operations, where a speedy union of cut surfaces is of the greatest importance."—*Chicago Medical Journal.*

MEDICAL NEWS.

"Nulla Dies, Sine Linea."

Appointment of Professors.—The Board of Visitors of the Medical College of Virginia, at the meeting on July 3d, 1867, appointed Dr. Francis D. Cunningham, of Richmond, Va., Professor of Anatomy, to fill the vacancy created by the resignation of Dr. Samuel Logan, who has recently been elected Professor of Surgery in the New Orleans School of Medicine. At the same meeting the Chair of General Pathology and Pathological Anatomy was, at the request of the Faculty, created by the Board of Visitors. Dr. E. S. Gaillard, of Richmond, Va., was elected to fill this Chair.

A correspondent of the Union Médicale, writing about medical matters at the great "Exposition," says the best arranged vehicles for the transportation of the wounded in the battle are those of the United States and of France. "The transportation of those who have been operated on, from ambulance to hospital, on the part of each nation, is formally installed [as we should say, 'has become an institution'] only in the United States. It must be confessed, these bellicose Americans, have had opportunity and time to experiment with their materiel. Ah, incredible people! so intelligent and so warlike."

The writer than gives an elaborate description of our "hospital car," and adds "all nations should take pattern from the United States in the arrangement of drugs, medicine flasks and boxes, for transportation. Everything fragile is protected. No shocks, overturnings, or other accidents can break the bottles or force out their stoppers."

The letter is closed with an admiring notice of our military hospitals.—*Boston Medical and Surgical Journal.*

Coercion Exercised upon Doctors in Peru.—The *Gaceta Medica* of Lima contains the following enactment of the Governor of Arequipa. No medical man is allowed to refuse assistance of any one, either by night or day, under a fine of £10, which may be enforced by the party thus refused. The like penalty is incurred by any apothecary who shall refuse to make up a prescription or to administer any remedy, be it in the course of the night or day.—*London Lancet.*

Dr. Martyn Payne, the venerable Professor of Materia Medica in the University Medical College, has retired from the active duties of his chair, after an acceptable service of twenty-five years, and is now Emeritus Professor. His successor, Dr. William H. Thompson, brings eminent qualifications to the position.—*Medical Record.*

Boston Public Baths.—Some idea of the great and growing usefulness of the free public baths may be gained from the fact, that on Saturday last the number of bathers at one of them, that at Cragie's bridge, was over twenty-three hundred, and this is only one of twelve similar establishments.

Dr. Stenhouse, says *Chambers' Journal*, announces that leather may be made water-proof, and its durability doubled at the same time, by applying repeated coatings of paraffine and oil, the absorption being assisted by warmth.

Improvement in Mirrors.—The manufacture of looking glasses and mirrors by coating with quick-silver, a protracted and life-destroying process, is to be dispensed with, according to a report by M. Salvetat, of the Paris committee on chemical arts, by a new invention which is to work a revolution in the decorative art, in windows and in mirrors, all at once. The French are always about to do something wonderful, and sometimes do it. The present wonder is a glass at once translucent and reflecting, so that it may be a window glass or a looking glass, or both, according to position. It is prepared by coating with a mixture of chloride of platinum, essence of lavender, and a dissolvent composed of litharge and borate of lead. The other ingredients being then driven off by heat, the platinum is firmly deposited in an attenuated film, presenting a brilliant reflecting surface against the glass, yet transmitting a softened and agreeable light. The film is said to be perfectly fixed, and evidently may be applied for decorative purposes in endless forms, and with either the most delicate or gorgeous effect, while its durability as against oxidation is of the first order. Thus a plate window may be at the same time a mirror or it may be at once adorned and shaded with the pattern of a lase curtain which will show white toward the street and enliven the interior with its soft brilliancy, or the sides and effects may be reversed.—*Scientific American.*

Taking in Sail.—As an evidence of the pinching times we have been experiencing for the past few months, two or three medical

journals have been obliged to suspend publication, while others, to avoid that contingency, have thought it best to take in sail.—Among the latter is the *Nashville Journal of Medicine.—Med. and Surg. Reporter.*

The International Ophthalmological Congress, which was to have held its annual meeting in Vienna, will be held in Paris. This change has been made on account of the expected presence in that city of a large number of men of science during the present summer and the impossibility of turning the current towards Vienna. The Congress will be opened on the 12th of August, and will be followed immediately by the International Medical Congress.

Tumour of the Cerebellum.—The uncertainty of diagnosis in affection is well illustrated by the following case, which we find in the *Union Médicale:*

"A case of Tumour of the Cerebellum, communicated to the *Gazette Médicale de Lyon* by M. Français. I hoped, on reading this title, to find something which might help to clear up the functions of the cerebellum, which are still surrounded by obscurity, notwithstanding the numerous works of contemporary physiology, but No! a tumour as large as a pigeon's egg, mammillated consisting essentially of Robin's cytoblasts, lodged in the centre of the left lobe of the cerebellum, prolonged as far as the opposite side, and to the inferior surface of the tent of the cerebellum, displacing the nervous substance, excavating a bed for itself, this tumour produced only a severe pain in the nape, an extraordinary stiffness of the neck, a kind of torticollis, occipital headache, some epileptiform seizures, a little amblyopia. There was no disturbance of the movement of the life of relation, nor of those of organic life; no affection of the sensibility; no interference with the coördination of movements; no trouble with the generative system. The patient, a young man of 23 years, died slowly in coma, preceded by great prostration and sub-delirium."

Treatment of Drunkenness.—It is said, in the *Connaissances Médicles,* that a half teaspoonful of the officinal liquor ammoniæ, properly diluted, will usually dissipate the violence of the symptoms of intoxication. A similar statement is referred to by Wood and Bache. We suppose that when people are drunk they are not apt to consult doctors; but the value of the above mentioned remedy might easily be tested at any of our Police Stations.

EDITORIAL.

"Nullius Addictus Jurare in Verba Magistri."—Hor.

As the Convention of Medical Teachers, recently assembled at Cincinnati, is now being noticed by Journals and the Newspapers of the Country, a brief allusion to the subject may be regarded as particularly appropriate.

The Teachers who assembled at the City specified, if not representing the entire medical Profession of the United States, at least were sufficiently numerous, distinguished and independent to entitle their proceedings to the confidence and respect of Physicians. Indeed, the admirable resolutions prepared, by them, embodied so much sound judgment and good sense, with an evident desire for an elevated standard of medical education, that they were unanimously adopted by the American Medical Association, as soon as presented.

If the whole Profession had been represented, these resolutions may have been modified or improved; the fact, however, is undeniable, that all Colleges were asked to be present, by their respective delegations, and though not universally accepting the invitation, though many Colleges from the South took no action in regard to this invitation, it must be admitted, by all who have the advancement of the Science of Medicine at heart, that the resolutions are excellent and entitled to general adoption.

The immediate and important question is, what practical and prompt disposition of the matter will be made by American Colleges? Will they adopt the entire policy indicated, or only a part of it, and in either case, when will this adoption be made? Will it be now, or will it be in the indefinite future? Will this production, the result of so much labour, be received still-born, by the hands of the Profession, or will it be welcomed and generously sustained? Evidently there is much to be done in this connection, and done promptly.

It is respectfully suggested that the committee appointed should address *a tabulated letter* of inquiry to all American Colleges,

requesting that, after due deliberation in regard to the inquiries specified in this tabulated letter, the respective Faculties should state what action they have resolved to take in relation to the resolutions prepared by the Teachers' Convention, and adopted by the American Medical Association; stating also, whether the resolutions will be adopted as a whole, or, if not, which of the resolutions will be rejected, with reasons given for each rejection. A copy of these replies, when tabulated, may be furnished to all medical Journals, and the whole Profession will then be advised which Colleges are obstinately resolved to adhere to fossil and inadequate policies in Medical education, and which are prepared, by a slight risk of pecuniary or other character, to respond to the demands of the Profession by thus adding to its dignity, respectability and efficiency.

Such a course on the part of the Teachers' Convention, is absolutely necessary now, as all are interested in the success of this admirable movement. Every College will thus be placed in assize, and by its replies, the Profession will, through general publication, be enabled to judge which are worthy of support and which should receive the most ruinous condemnation.

Immediate action should be taken in regard to this matter. The first resolution should be universally adopted. An examination for matriculation is indispensable. It might be conducted, by well prepared Junior Practitioners, having no connection with the medical College. These gentlemen have abundant leisure usually, and such a position would be advantageous, by placing them, to a certain extent, before the medical, as well as general Public; when, if appearing to advantage, in their relations as examiners, the fact would elevate them in the estimation of all, and aid them in their efforts for advancement. No one connected with a College should consent to act in the capacity of an examiner. Such a course would be certainly injurious. It would manifest an absence of all independence. A committee of the Faculty might be present, at these examinations, as such action would be acceptable to all parties. No student, with or without a diploma, should be exempted from this examination. If without a diploma, he brings no evidence of efficiency; if with one, he can endure the ordeal easily, or if not, his diploma has either been unworthily obtained or suspi-

ciously conferred. Any deviation from such a rule creates the cry of partiality, and tends to hopeless and rapid retrogression.

It has been said that such an examination is unnecessary, and that the standard adopted is too severe; that great men in the Profession could not have endured it; that these were illiterate and unlearned, etc., etc. Such objections are mere sophistry. If all men were like Velpeau, or Dupuytren, or Drake, or Caldwell, or Gross, or Hunter, or Dudley, etc., with a host of others, who, in centuries, have elaborated a distinguished reputation, from educational resources greatly restricted, it only shows what great men can do, and not what ordinary minds would do. Again, if the worthies named had been educated well, their reputations would have been far greater, or else the world, as a whole, is labouring under a delusion in regard to educational advantages. One may as well object to an improved plow or reaper, because some industrious Spaniard has reaped large returns with a stump drawn by the hand, and an ordinary knife converted into a reaping-hook. Examples without number could be given of this parity of reasoning, but surely this is unnecessary. Examine every matriculant, if it is desired, to make him respect himself and the College attended; to render him a credit to the College at graduation, and an ornament to the social and Professional circle in his after life.

The requirement of four full years of study, including three annual courses of lectures, before the final examination, is admirable; so also is the resolution, that the annual lecture term should be six calendar months. That there should be, at least, nine Professors, is certainly a necessity; the subdivision of the studies, however, should be entrusted to them and not (as is the case in the fourth resolution) made arbitrary. No parts of the resolutions adopted, are more to be admired than those dividing the number of students in attendance, into three classes. This system works well in literary colleges, and is an essential for the efficient instruction of the student.

The suggestion of adopting some sure means of ascertaining the actual attendance of each student, upon the lectures and exercises of the College, with a certificate given (showing the regularity of such attendance,) at the period of the final examination, is excellent.

Nothing, lastly, is more important, than that each student, though having undergone the examination of his class, at the end of each session, should, at the period of his final examination, be subjected to an examination in regard to all the subjects taught, during his connection with the College.

As has been said, these resolutions are excellent and admirable, but those having in charge their practical disposition, must be prepared to see disappointment, failure and confusion, unless there is instituted, by them, action, general and immediate.

The undersigned proposes issuing from Indianapolis, commencing in July, a monthly medical publication of sixty-four pages, under the name of the *Western Journal of Medicine:* it will be simply a transfer to Indianapolis, with this change of name, of the Cincinnati Journal of Medicine. The merits of the Cincinnati Journal have been acknowledged by all who have had an opportunity of judging, and there will be an ardent desire and endeavour to make its successor equally worthy of professional patronage. Prof. Blackman, whose fame and ability are so well known, will be a frequent contributor to the Journal. Dr. Reeve, of Dayton, Dr. Carson of Cincinnati—two of the best medical scholars, in the West—other gentlemen of reputation of other States, and several physicians of this State have promised to write for its pages.

The price for six months, commencing with July, will be but $1.50: those who may wish the immediately preceding six numbers of the Cincinnati Journal, will receive them at the same price—an investment both cheap and satisfactory—while those who are already subscribers, *and have paid their subscriptions*, will receive this year's issue of the *Journal of Medicine* without other charge. Subscribers can also be supplied with all the numbers, except that for February, of the Cincinnati Journal for 1866, for $1.50.

Dr. Theophilus Parvin.

The Editors of this Journal, welcome this addition to the exchange list with pleasure. Prof Blackman has edited the "Cin-

cinnati Journal of Medicine" with marked ability, and there is every reason to believe, that, in the hands of the new editor, the reputation of this Journal will be fully sustained.

THE TEXAS MEDICAL JOURNAL.—On the 1st of July (proximo,) Drs. Boring & Gantt will issue the first number of this Journal, a monthly octavo of eighty pages, devoted to Medicine in all its branches.

The current literature of the Profession, both from abroad and our own country, will be faithfully chronicled and reviewed.

Special attention will be given to the diseases, and types of diseases, peculiar to Texas, together with the practice of Medicine by Texas Physicians, and no pains will be spared to make the Journal a faithful reporter and exponent of the science and profession of Medicine.

Terms :—Six dollars, per annum, U. S. Currency, invariably in advance.

This Journal is welcomed by all friends of Medical literature, and ought to be well supported.

THE AMERICAN JOURNAL OF DENTAL SCIENCE.—We welcome this old Journal, which has been suspended for several years. In times past it was the pioneer of dental periodical literature. We trust it may resume its former position and influence. The initial number promises well. The old familiar names of A. Snowdon Piggot, A. M., M. D., and F. J. S. Gorgas, A. M., M. D., D. D. S., appear as editors. It is published monthly, at $3 a year, and has our best wishes for its success.

ERRATUM.—In notice of the University of Maryland, in June number, for "deducting" read "didactic."

NOTICES.

☞ THE EDITORS of this Journal, after fairly trying a liberal policy, for the convenience of many whom the late war left without

pecuniary resources, have determined to adopt a complete and permanent change.

Letters, in all respects polite, have been written to very many who had entirely neglected the liquidation of their accounts; to the writer of these letters, there has seldom been manifested the ordinary courtesy of a reply; yet such gentlemen have continued to receive the Journals sent to them. Such a course needs no comment, and each subscriber knows to whom the charges of injustice, discourtesy and illiberality are applicable. The Editors trust that these charges will be appropriately applied.

The credit system, under such circumstances, is therefore abandoned. Apart from its risks, which may be successfully borne, it entails an enormous correspondence upon the Editors, and this painful, expensive, and often futile labour, will no longer be performed.

Notice is then given, that no number of this (the fourth) volume, or of any future volume, will be furnished to any one, unless the amount of subscription is sent with the order. When the period of any subscription terminates, the Journal will be discontinued, unless the amount due for its continuance, is punctually forwarded.

The Journal will be discontinued to all who are in arrears, after the September number of the present year, and for the protection of the Editors, all means practicable will be instituted, for the collection of the amounts respectively due.

The special arrangements made with a few gentlemen, for this year, will, of course, be respected, and to them the Journal will be continued for the year; though it is asked, that, if possible, the the amounts due be forwarded.

The fact that the number who pay promptly is sufficient to fully sustain the Journal, when it is not sent to unremunerative subscribers, and the unsatisfactory experience in regard to those who do not appreciate a credit extended to them, induce the Editors to adopt this course. All in arrears are respectfully asked to liquidate their accounts, long since due.

To all the Journal will hereafter be furnished, only on the terms specified.

University of Louisiana.—The Faculty of the Medical Department of the University of Louisiana desire to call attention to the following paragraph, extracted from their Annual Circular for the session of 1867 and '68:

"*Library and Reading Room.*—The large building known as the East Wing of the University having been appropriated to, and connected with the Medical Department during the past season, the Faculty have been enabled to carry out a favourite plan of the late Professor Hunt, of establishing a Free Library and Reading Room for the use of students and Physicians. The spacious hall selected for this purpose is now receiving the necessary furniture, and in a few weeks the large collection of books already in the possession of the Institution will be arranged upon the shelves, and made accessible to those who may desire to consult them.

"All the leading Medical Journals, both domestic and foreign, and most of the new works on Medicine, and the collateral branches published in this country, will be placed upon the tables as they are received; and the Faculty hereby extend a cordial invitation to all Physicians visiting the City to take advantage of the opportunity here afforded of making themselves acquainted with the current literature of the Profession. Neither the books nor journals will be allowed to be taken from the building, but every facility will be provided for consulting them in the library room."

"The Library will be open to visitors and students several hours of each day." S. M. Bemiss, Acting Dean.

Philadelphia School of Operative Surgery.—*Summer Announcement.*—Lectures, embracing full instruction on bandaging, treatment of fractures, regional anatomy, and the various operations in surgery, illustrated by all the resources of this old established School, will be delivered during the months of April, May, and June. The practical part of the Course will consist in arranging the class into sections, affording every one an opportunity to repeat all the dressings and operations. The Cadaver and all necessary instruments furnished without additional charge. The above order and the included review examinations, make this a desirable course

for candidates for the Medical Corps of the Army and Navy. Fee for the whole course, $20; Fee for the lecture alone, $10.

Special Course.—Private operating apartments have been recently added to the School, in which candidates for promotion in the Army and Navy, and other Physicians who may wish to review their surgical studies, can have private instruction in a comparatively brief period. Fee for the course, $40.

Venereal Diseases and the Microscope.—If a class numbering not less than four can be obtained, a series of concise comprehensive Lectures will be delivered on Venereal Diseases, aided by faithful drawings and by clinics. In connection with this course, will be given, the microscope, its history, some of its revelations in health and disease, and an insight into its clinical use. Fee for the course, $10.

The Lecturer will receive a few pupils as office students, either in conjunction with or independent of his lectures. Text books, charts, bones, preparations, specimens of materia medica, instruments and their use, (including microscope, ophthalmoscope, speculum, &c.,) will be at their free disposal. Also the privilege of medical and surgical clinics will be granted them, at one or more of the hospitals in the City. Course of lectures to commence April 1st; ending in October, with the usual vacation in July and August. Students wishing to enter the above classes, or either of them, can procure tickets and any further information (before the Lecture commences) of the Lecturer, at his residence, 1428 North Seventh Street, or at the School at 12 M. each day.

William Mason Turner, M. D., Lecturer.

☞ Drs. Chesney and Brock, New Market, Platte Co., Mo., appreciating the importance of a thorough "office" education, are prepared to offer unusual advantages for a preparatory training, to a few young men who intend making Medicine their profession. For particulars, call in person or address them by letter.

☞ All gentlemen whose letters require a reply, are respectfully requested to enclose a stamp. This stamp is but a small expense

to the writer of the letter, while the very heavy correspondence which has been developed with the Journal Office, makes the cost of stamps a serious tax. This usual request has long been postponed. It is now made with reluctance, and it is hoped that all correspondents will recollect it.

☞ The International Medical Congress at Paris.—The International Medical Congress will be opened at Paris on the 16th of August next. The Central Committee earnestly desire an active participation in the Congress on the part of Medical Societies from all parts of the world, by sending delegates to represent them.

By the third article of the Statutes, foreign delegates are admitted without any pecuniary consideration.

The undersigned having been appointed a Corresponding Delegate by the Central Committee at Paris, would urge upon Medical Societies the propriety of appointing delegates to the Congress as speedily as practicable, and reporting them to him, that he may forward them as early as possible to the Central Committee.

S. W. Butler, M. D.,
Philadelphia, Pa.,
Corresponding Delegate.

☞ Short Articles.—It is requested, that articles contributed for this Work, should be brief and practical. With few exceptions, long communications are distasteful to readers and are generally neglected; it is difficult to make room for them. Papers of merit are retained for many months, when, if the valuable truths contained were briefly presented, they would be promptly published. It is the desire of the Editors of this Journal to increase, relatively, the Eclectic Department, and, to effect this, original papers of limited extent are preferable.

☞ Where manuscript is sent to the Editors of this Journal, all writers are respectfully requested to state whether remuneration is desired.

There is such a difference in the intention of those writing for this Work, that it is necessary to make this request.

☞ The Editors of this Journal wish it understood that they do not desire the subscription of any one who is unwilling to observe honourably and in good faith, the "terms" to which he subscribes. If any one is unable to pay five dollars within the period specified, or is unwilling to pay subsequently the additional amount necessary for his accommodation, it is requested that he will abstain from subscribing.

☞ NOTICES TO SUBSCRIBERS, ADVERTISERS, CONTRIBUTORS AND CORRESPONDENTS.

Those once ordering the Journal will each year be considered as subscribers, and the terms of this Journal adopted in regard to them. An order for discontinuing the Journal should be sen at least two months in advance. As is usual, no subscription or advertisement will be discontinued until arrears are paid.

The Publishers assume the risks in regard to all amounts sent by mail, if the packages or letters are registered. When practicable, all sums to be so sent should be deposited with the Postmaster, and the "money order," obtained from him, transmitted.

Receipts for all amounts transmitted, will be sent in the Journal, for the succeeding month.

It is desired to obtain for this Journal one Agent in every City and Town.

To each Agent there will be allowed twenty per cent. of the amount due for each subscription or advertisement.

For the accommodation of the Profession, there will be furnished, with this Journal, one or more American Journals, including the reprint of the London Lancet, at ten per cent. less than the aggregate cost of the additional Journals desired.

All communications sent by mail should be directed to Dr. E. S. Gaillard, Locked-Box 32, Richmond, Va. Those to be delivered personally, should be left at his office, 404 Franklin Street, between Fourth and Fifth Streets.

European packages, sent through Trubner & Co., 60 Paternoster Row, London, or J. B. Bailliere et Fils, Rue Hauterfeuille, Paris, will be safely forwarded.

It is expected that all expenses will be paid on packages, foreign and domestic, sent to this Journal.

All contributions or papers, intended for insertion in the next Number of the Journal, should be received by the middle of the month preceding.

Contributions for publication must bear the signature of the writer, and must be communicated to this Journal exclusively.

Original articles should be written on one side only of each sheet, and the manuscript should be, by the sign (¶), divided into paragraphs.

Contributors can have forwarded to them, at a small expense, one hundred or more copies of their articles, in pamphlet form, provided the order to this effect be received before the period of publication.

The Journal will be sent a second time, when not received one month after the usual period of its appearance.

Rejected manuscript will be returned, if desired, by mail or Express, at the expense of the writer.

Each subscriber will give at length his name, Post Office, County and State.

☞ This Journal is published as a Monthly octavo of ninety-six pages. It is now the largest Medical Monthly issued in America.

The Editors offer to pay, at the HIGHEST JOURNAL RATES, for ARTICLES, ESSAYS, CORRESPONDENCE and REVIEWS OF RECENT WORKS.

The terms of this Journal have been changed; see notice on the cover.

BOOKS AND JOURNALS RECEIVED.

The American Journal of Dental Science, Baltimore, Md.

Circular No. 5, War Department, May 4th, 1867. On Epidemic Cholera.

Catalogue of the University of Virginia 1866-'7.

Annual Circular of the New Orleans School of Medicine.

Report of the International Sanitary Conference on Asiatic Cholera.

Physiology of the Heart. By Claude Bernard, Paris. Translated by T. S. Morel, Savannah, Georgia.

Ununited Fracture Successfully Treated: with Remarks on the Operation. By Henry J. Bigelow, M. D., of Harvard University.

Quarterly Summary of the Transactions of the College of Physicians of Philadelphia. 1865-66.

Menstruation, or the Menstrual Flow. By G. M. B. Maughs, M. D., Prof. Medical College, St. Louis, Mo. From the Author.

Thirty-first Annual Announcement of the Medical Department of the University of Louisville, Ky. 1867.

Reminiscences of Charleston. By J. N. Cardoza, Charleston, S. C.

Dr. McDowell's Letter to the Assembly of Teachers at Cincinnati, Ohio. 1867.

Notes of Observation to Ascertain the Ultimate Distribution of the Nerves of Gustation. By Dr. Rufus King Browne, New York.

Notes on Asiatic Cholera. By John C. Peters, M. D., New York.

The following Exchanges are regularly received: The Atlanta Medical and Surgical Journal; Boston Medical and Surgical Journal; Braithwaite's Retrospect; Buffalo Medical and Surgical Journal; Chicago Medical Journal; Chicago Medical Examiner; Cincinnati Lancet and Observer; Druggist's Circular and Chemical Gazette; Galveston Medical Journal; Journal of Applied Chemistry; London Lancet—Original and Reprint; New York Medical Record; The Planter; Richmond Eclectic; New Orleans Medical Journal; New York Medical Journal; Pacific Medical and Surgical Journal; St. Louis Medical and Surgical Journal; Savannah Journal of Medicine and Surgery; Southern Journal of the Medical Sciences; Southern Medical and Surgical Journal; The American Journal of Pharmacy; The American Journal of the Medical Sciences; Dental Cosmos; The Detroit Review; Philadelphia Reporter; The St. Louis Medical Reporter; Le Mouvement Medicale, Paris; Journal de Medecine Mentale, Paris; Medical Press and Circular, Dublin; Revue de Therapeutique Medico Chirurgicale, Paris; Revue Medicale, Paris; Cincinnati Journal of Medicine; Canada Medical Journal; Journal of Materia Medica; The Ophthalmic Review, London; Dublin Quarterly Journal of Medical Science; Medical Mirror, London; Debow's Review; Littell's Living Age; The Farmer; London Punch, The American Naturalist.

AGENTS.

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The Richmond Medical Journal.

Vol. IV. AUGUST, 1867. No. 2.

ORIGINAL COMMUNICATIONS.

"Qui Docet Discit."

Art. I.—An Epistle on Homœopathy. By Prof. Richard McSherry, Baltimore, Md.

A Professional friend recently spoke in such terms of the modern nymph Homœopathia, as to lead me to think he was unduly pleased with her. A mild remonstrance on my part, brought on an argument. The damsel, as I contended, was not at all worthy of the regards of any legitimate son of Æsculapius, being herself an illegitimate descendant from the same distinguished ancestor, and born, like a pagan goddess, from the cracked brain of a demigod indeed, in the opinion of his followers, but a demented enthusiast according to other members of the Æsculapian family. My friend retorted that I was unduly prejudiced against her, and would be so until I would take the pains to read her defence by some of the very able men who are her advocates and ministers. My reply to this was, that I had read several books and pamphlets in the interests of Homœopathy, but that they were far from making a favourable impression, and that they savoured rather of boastful charlatanism than of true science.

The rejoinder to this was, that a Dr. Sharp, an Englishman, had written a capital series of essays on the subject of discussion, which

deserved the attention of all Professional men who desire to be well informed. Having the honour to belong to this section of Professional men, I expressed the wish at once to read Dr. Sharp's pamphlets, which my friend readily procured for me. In no calling is the maxim *audi alteram partem* more worthy of acceptance than in ours, and in Medical, as in other controversies, we may admit, with the cautious gentleman in the *Spectator*, that "there is a great deal to be said on both sides."

Medicine, in theory and practice, is full of intricacies and obscurities, and this must be so while life and death are ineffable mysteries; but now and then we get a gleam of light that helps us in our labours and enables us to work more intelligently and more beneficially in the service of suffering humanity. Every such gleam we must accept with grateful hearts from whatever source it may come. No true Physician can disdain or reject one scrap of useful Professional knowledge. If Hahnemann had more lights than his predecessors, let us have the benefit of them. If Dr. Sharp has yet more lights than his master, let us profit by them also. Imbued with this spirit, I read Dr. Sharp's essays with the fair design of acquiring useful knowledge. If your readers will bear with me, I will lay the results before them, somewhat at length.

There are now in my possession eight of twelve "Tracts on Homœopathy," written by William Sharp, M. D., F. R. S., an experienced Practitioner of the old school, as he informs us, before his conversion. The tracts are entitled, "The Small Dose of Homœopathy," Tract No. 4; "The Advantages of Homœopathy," Tract No. 6; "The Principle of Homœopathy," Tract No. 7; "The Controversy on Homœopathy," Tract No. 8; "The Remedies of Homœopathy," Tract Nc. 9; "The Provings of Homœopathy," Tract No. 10; "The Single Medicine of Homœopathy," Tract No. 11; and finally, "The Common Sense of Homœopathy;" Tract No. 12.

In Tract No. 4, three leading questions are proposed and answered. The questions are, "1. Are we acquainted with any facts which render it probable that infinitesimal quantities of ponderable matter *may* act upon the living animal body? In other words, what does *analogy* teach us? 2. Are there any facts which show the action of infinitesimal quantities of ponderable matter on

the *healthy* body? 3. What are the actual proofs in support of the assertion that such minute quantities of ponderable matter act remedially on the *diseased* body?"

These pertinent questions are followed by several pages of facts or assertions from the domains of chemical and mechanical philosophy; a dissertation upon the minutiæ of sound and sight, &c.; upon oxygen and hydrogen, &c.; with divers questions as to ultimate facts, which so far admit of no answers from philosophers of any school.

In the midst of this array of learning, we find the following paragraph:

"The small dose of the Homœopathist, viewed in the light of this double limit, may be thus considered: Chemical tests follow the grain of medicinal substance to the third trituration, that is, till it has been divided into a million of parts, and a good eye, assisted by a powerful microscope, can follow it to the fourth or fifth trituration; beyond this it is absolutely lost to the perception of our sight. The sense of smell can detect musk to the fifth or sixth dilution. Everything that we know, forbids us to conclude that the division of matter stops here, but our senses cannot follow it further. On the other hand, our power of observing the effects produced by these doses, has no limit but the sliding scale. Admitting for the moment, which I think I shall afterwards prove, that effects are produced, it is evidently as easy for us to observe them after a dose of the thirtieth as after one of the third, or of the first trituration. The same cautions are necessary, but nothing more."

It may be remarked, *en passant*, that the first trituration gives the 1-100 part of a grain, which is an appreciable and admissible dose with some medicines, or poisons, according to regular or *old* practice, as, e. g. aconitia; while the third trituration gives the 1-1,000,000 part of a grain, and the thirtieth a decillionth, it is said, which cannot be conveniently expressed in figures, and of which, indeed, the mind can scarcely take cognizance. The sons of Æsculapius, of other descents than through Hahnemann, do not believe that a grain, or drop of any known medicine, has any remedial power in the third trituration or dilution, and consequently,

still less do they believe it to be effective in the thirtieth trituration or dilution.

This point of difference may pass for the present.

Our author then propounds again, question No. 1, and opens his reply in the following terms: "Look at that bright star! so remote that the astronomer, with his telescope, cannot calculate its distance, and yet its brilliant beams of light strike upon the eye and convince the merest child of its existence. What a vivid flash that was, and how loud the thunder! see yonder oak riven to its centre—what an irresistible force, and yet the chemist, with his most delicate balance cannot perceive its weight. * * * What is light? * * * For our present purpose it is unimportant which theory (of the nature or phenomena of light) is regarded as the true one, inasmuch as both assume that matter, in some form, is concerned in producing the various impressions of light and colour upon the living animal body. The effects are produced by imponderable, but not by immaterial agents. To convey some faint notion of excessive minuteness, it may be mentioned that the length of an undulation of the extreme violet ray of light is 0.0000167 of an inch; the number of undulations in an inch is 59,750; and the number of undulations in a second, is 727,000,000,000,000,000, (727 trillions); while the corresponding numbers for the indigo ray are, length, 0.0000185 of an inch; 54,070 undulations in an inch, and 658,000,000,000,000 (658 trillions) in a second. The other rays differ in similar proportions."

What plausible or valid objection can Allopathy make to all this? I know of none.

"That space is occupied by minute particles of matter, admits of being proved in another manner, quite independent of these observations on light. * * * * Thus, by another series of observations, we arrive at the same conclusion, that there exists a rare, subtle and imponderable form of minutely divided matter.—Infinitesimal quantities of this imponderable matter, are capable of acting energetically, and they *do so act* habitually, producing such impressions as those of light, as upon the living animal body." It would be difficult to find a disputant that light and heat, &c., do not act appreciably upon the animal organism; though it is rather

where they "cover it all over, as with a mantle," than when admitted in invisible and insensible proportions. Is the reader convinced or not? or does he stand agape like honest Dr. Primrose, at the fair, when his learned friend and admirer—the same who bought his horse—treated him to a brief discourse on cosmogony, until, suddenly interrupting himself, he had to admit he was straying from the question. "That he actually was; nor could I for my life," says the Vicar, "see how the creation of this world had any thing to do with the business I was talking of, but it was sufficient to show me that he was a man of learning, and I reverenced him the more."

Our author, however, has no difficulty in finding the application of the philosophical facts stated, and from them he answers question No. 1 summarily as follows:

"Reasoning then from analogy, we may conclude it to be probable that other forms of matter, even though reduced by the successive triturations into *similarly small dimensions*, may also act, and act powerfully upon the living body."

Question No. 2 is again propounded. We are then told of the mechanical division of gold, which "in gilding," may be divided into particles, at least one thousand four hundred millions of a square inch in size, and yet possess the colour and all the other characters of the largest mass. * * * * The perfection of modern chemistry is such, that a quantity of silver equal to the billionth of a cubic line, can be readily detected. That particles become divided into less proportions than is shown in these examples, is evident from the daily observations of the sense of smell. The violet fills even a royal apartment with its sweet odour, which is thus readily perceived, but which absolutely evades every other mode of observation. How inconceivably small must be the particles of all odours! And yet how obviously material they are."

"These are instances of infinitesimal quantities of matter acting upon the *healthy* body."

There appears to be some little confusion in these instances. An infinitesimal particle of gold may, indeed, cover an infinitesimal particle of wood, under the unconscious hand of the gilder, but if *one* of the same particles gets into his mouth or stomach, he is not

appreciably any the better or any the worse for its misapplication. The odour of a violet may fill no doubt "even a royal apartment," and royal lungs and royal nostrils at the same time, but as in the case of light there is an infinitesimal application to infinitesimal surface, or a wide-spread application to a great area, as one may please to consider it. We cannot explain how the air is perfumed with imponderable matter, but we know, as a matter of fact, that odours do not become *more potent*, like homœopathic remedies, in proportion to their *greater dilution*. They are clearly more potent according to their concentration, as every man, woman and child knows from experience.

The following ingenious proposition by our author, though not new, is confessedly plausible:

"A clergyman visits a patient in scarlet fever, but does not touch him; he afterwards calls upon a friend and shakes the hand of one of the children as he passes her on the staircase. The next day this child sickens with the scarlet fever, and her brothers and sisters take it from her; no other connection can be traced. This is no uncommon occurrence, and no one doubts the communication of infection in such a manner, neither is it doubted that the infection itself is something material. What is the *weight* of the particle of matter thus conveyed? Is it heavier than the millionth of a grain of belladonna, which, it is asserted by homœopathists, is sufficient, when given at short intervals, to arrest the progress of such a case?"

Nothwithstanding a degree of looseness and inaccuracy in the above paragraph, (as, *e. g.*, "the *next day*, after contact with the clergyman, the child sickens," &c., a proof in itself, to the *old school* Physician, that the child took the disease not from the clergyman, but from some other source,) there is not in all of Dr. Sharp's essays a more ingenious point made for his favourite system. But when the matter is brought to the crucible, what is the result? There is something about the nature and workings of contagious diseases that has sorely tried the medical philosophy of all ages.—No medical Œdipus has yet come forward to solve the riddle. But there is a well sustained theory that contagious diseases for the most part, as some others, are spread by certain germs which are

wafted or carried in various ways so as to find admission into the animal system, where, finding material to act upon, they act as leaven, and we have it upon older authority than Hahnemann that "a little leaven leaveneth the whole mass." There is nothing better than this theory broached or known. Now to find a parallel between the minute germ which spreads disease by a process akin to fermentation, and the action of an infinitesimal remedy, it should be shown that a millionth of a grain of belladonna has some power of self-multiplication and propagation.

The emanation from powdered ipecacuanha, is very distressing to some subjects, producing asthmatic or other suffering. The author finds in this fact a proof of the efficiency of the small dose of homœopathy. Here, however, as in the case of the odour of the violet, the floating particles, infinitesimal as each may be, find their way to a large surface of sensitive mucous membrane, and by their acrimony, they occasionally cause dyspnœa. Many impurities in the air have a similar influence, but they all impinge at once upon a very large surface. Withal but few persons, comparatively, are so affected by ipecacuanha, and no more inference can be drawn from an exceptional fact of this kind, than from the fact that some one person, from idiosyncrasy, is made sick by the smell of a cat in a room, which smell is not appreciated by ninety-nine out of one hundred persons in the same room. Many persons are made sick by the mere recollection of an offensive taste or odour. I have known a gentleman to be made sick from the swinging of a lantern, aboard ship, which he took to be due to the pitching of the vessel, and to be cured upon learning that the lantern was swinging from an accidental collision, while the ship was riding quietly at anchor. An infinitude of such facts is familiar in the records of medical experience.

Our author having answered questions No. 1 and No. 2, to his own entire satifaction, and having adduced "undeniable proofs," the chief of which have just been brought forward, proceeds to the consideration of question No. 3, which is almost conclusively answered by the findings in numbers 1 and 2. "It now, therefore, only remains, that by the evidence of facts, I prove, generally, that they (infinitesimal doses,) do act, and particularly that their

action is beneficial in disease." The same proofs, it is asserted, show the efficacy of infinitesimal doses that show the efficacy of large doses of medicine. "A patient is cured of a violent headache by a dozen leeches," (not a very happy illustration, by the way, of *doses of medicine.*) "Another has a similarly violent headache; the millionth, or the billionth of a drop of the juice of the deadly night-shade is given; relief quickly follows," therefore the millionth or billionth of a drop of this medicine is equal to the influence of a dozen leeches upon the system.

The author then gives us, very briefly, accounts of his triumphs over various formidable diseases, including *inter alia*, croup and erysipelas, as follows:

"*Croup.*—I have stated in another of these tracts, that several cases of croup have been treated after the new method. I have only to add here, that the medicines were given in infinitesimal doses, and to assure my readers that the relief afforded, without any other treatment, not even a warm bath, or a mustard poultice, was in every instance, most obvious, rapid and complete."

Here is then the *experimentum crusis:* one of the most dangerous of our ordinary diseases, is cured always, rapidly and completely, by infinitesimal doses—the millionth or billionth of a grain or drop, while the mortality is confessedly large, according to the records of regular practice. But did our regular Practitioners, in support of their arguments, use such summary assertions, with the hope of carrying conviction to the minds of their Professional brethren?—When we hear one discoursing with matrons in such terms, we infer only, that that individual has lost his trumpeter. If put through a course of cross-questioning by members of the Profession, he would probably have to make some damaging admissions. In short, the statement above, resting merely upon the *ipse dixit* of a special advocate, which makes no distinctions as to the various forms of disease, spoken of under the common name of croup, which ignores exact diagnosis, and pathology and gives not one word as to the detail of treatment, is not one whit better than tinkling cymbals and sounding brass.

"*Erysipelas.*—This is always a serious, and often a fatal com-

plaint; it affords a good example of the confusion and inconsistency of allopathic medicine." Our author then quotes Mr. Nunnelly as a witness concerning the contradictory modes of practice used by regular Physicians.

It is not so with the Homœopathic treatment of erysipelas.—"With minute doses of belladonna, rhus and jaclusis, the usual remedies for this peculiar inflammation, I have succeeded in all the cases I have met with—among them were four severe ones—beyond my expectations. In one case, on the second day of the attack, the inflammation had spread over the face, ears, and most of the scalp, and part of the neck, with a large blister on each cheek, very severe headache, and a pulse of 150; this was entirely well at the end of a week."

We may admit the truthfulness of this statement, without giving any more credit to the infinitesimal doses of the medicines, than to the water or the sugar of milk with which they were administered. Erysipelas is not ordinarily a fatal, or even a dangerous disease.—Like most other diseases, it may be treated advantageously by opposite measures—by depletion or stimulation, according to the character of the attack, or the condition of the subject. But very many cases require *nothing* in the way of medicine. "On going around the wards of the Hotel Dieu, in May, 1851, with M. Louis" says Prof. Bennett, "I saw several cases of erysipelas of the scalp, which, I was told, were under no treatment whatever; because, as M. Louis informed me, according to his experience, erysipelas of the scalp was *never* fatal, unless it occurred in individuals of bad constitutions, or was associated with some complication." If M. Louis, one of the greatest Physicians in the world, had been a homœopath, he would have given the billionth of a grain of belladonna, or a granule of sugar of milk, which would have answered quite as well under some other name, with the same result, and he would have cried out with a loud voice, "behold the efficacy of infinitesimal doses!" But M. Louis, though deep in the science of Medicine, is not an adept in the *art* of homœopathy.

The illustrations of successful treatment by infinitesimal doses above cited, are as striking as any adduced by Dr. Sharp, and may pass for what they are worth. While they are intended to show the

value of the treatment in acute disease, there are others equally convincing as to the treatment of chronic disease. But one example is cited in this paper, and it is selected only for the merit of its brevity.

"*Warts.*—In three cases out of four, I have succeeded in clearing the hands of ugly warts. In all by internal treatment alone, and with infinitesimal doses of the medicines employed." We are not enlightened as to the nature of the remedies, nor *as to the time required;* a matter of some importance in medical investigations, particularly as other Physicians have often observed warts to appear unbidden, and disappear suddenly, without any treatment whatever.

I have now given your readers a fair summary of one of the cleverest tracts of one of the cleverest professional advocates of Homœopathy. Dr. Sharp considers his proofs conclusive as to the efficacy of infinitesimal medication. "It is credible that the small dose can effect a 'safe, speedy and permanent cure' whenever a cure is possible, *when it is found practicable to do so.*" The Doctor's small dose most frequently used, is the third dilution, "in which the grain or the drop, is divided into a million of parts." This is rather a *large dose* in his school of practice; but it may be as efficacious quite as the 30th dilution—the decillionth of a grain or drop—which he has seen to have beneficial effects! The Doctor invites Physicians to try these doses before they declare them to be worthless. There is something in this which seems fair, and any reader of the Journal can very readily, and with little pains, pour —— gallons of water upon a drop of tincture of belladonna in a large tub or barrel, and try one drop of this third dilution upon any of his patients whom he desires to bring under belladonna influence. But he must not content himself with *purchasing* the medicine *already diluted,* for fear of some slight error in quantity. I urge this the more particularly, as very large doses, thanks to modern chemistry, may now be condensed into very small bulks.—To say nothing of aconitia, digitalin, atropia, &c., whereof the regular dose ranges from the 1-20 to the 1-100 of a grain, there are many remedies in common use, in what the homœopaths are pleased

to call the allopathic school, in which ordinary doses vary from 1-4 grain to 1-20 grain, as morphia, arsenious acid, strychnia, &c.— Now if the millionth, or billionth, or decillionth of a grain of any of these drugs will suffice to cure disease, it is singular that homœopaths should ever resort to what regular Physicians consider full doses. There is abundant evidence that they do so. Full doses of morphia (1-4 grain and more) have been found in medicine used by them for the cure of dysentery in this City. Full doses of strychnia, and even very large doses, have been detected by analysis in packets *given*, (not *prescribed*,) by homœopaths.

I had intended to give a passing notice to each of Dr. Sharp's tracts, but such notice would require more space than they merit. Sophistry and bold assertion are, throughout, made to bolster up experiences that are, at best, very equivocal; that in short, have nothing of the true tone of science about them.

I will now only make a few discursive remarks upon various points urged in these tracts, supposed to be among the best exponents of infinitesimal medicine. Our author, in divers places, rejoices greatly over the contradictions which are unfortunately somewhat common, both in theory and practice, among regular Physicians, but he seems to be often quite opposed in both to many of his own brethren, and even to his Magnus Apollo, Hahnemann. When John Chinaman thinks his idol *Josh* has done him a good turn, he falls down and worships him, but when Josh has allowed trouble, evil instead of good, to fall upon his worshipper, John does not hesitate to recompense him with a drubbing. Dr. Sharp pursues a not dissimilar course with Hahnemann.'

Hahnemann's formal definition of this law of Homœopathy (like cures like) in the organism, is as follows:

"A weaker dynamic affection is permanently extinguished in the living organism by a stronger one, if the latter (whilst differing in kind,) is similar to the former in its manifestations."

This paragraph, instead of announcing a natural fact, which he had discovered, states a fiction which he had imagined. He gives us no sufficient evidence to prove that the artificial disease induced by the remedy, is a stronger one than the previously existing natural disease. Analogy does not make it probable that this should be

the case, especially with an infinitesimal dose of the remedy, and if it were so it would be still less probable that such a mode of proceeding could restore any one to health. "I am constrained, therefore to regret this definition, and venture to propose the following as a substitute:

"*Every material poison gaining admission into the healthy body, has a tendency to produce a diseased condition, induced by symptoms or physical signs, more or less peculiar to itself; and every such poison is the most appropriate remedy for a similar diseased condition which has arisen from other causes.*" (Vide Homœopathic Action of Drugs, Tract 9, page 20, 21.)

Here we find a law, based upon observation (!) in place of Hahnemann's "fictions," which teaches that in a case, e. g., of acute gastritis, the true remedy would be arsenic or corrosive sublimate. An allopathic remedy in such case would be *ice*, and there is probably more in nature or art, which would be equal to this, judiciously administered.

Our author frequently speaks of the unwarranted assumptions and assertions of his master. "For example, he assumes that 'spiritual power is hid in the inner nature of medicines;' that 'homœopathic dynamizations' (rubbing the solid in a mortar, and shaking the liquid in a vial) 'are real awakenings' of this power, and hence, he at one time asserts that there must be ten shakes; at another, only two." (Tract 8, p. 21.) Our author then proceeds to castigate his Josh with something very like ridicule, and not without good reason. Indeed, it would be difficult ever to settle the right number of shakes, according to the Hahnemann theory, that increased dilution adds to the potency of medicines, and that every shake adds to the "dynamization" or "spiritualization" of the remedy. According to common report, several cases of dangerous narcotism have occurred in this City from the use of some remedy given by homœopaths, which acted like excessive doses of morphia. The question then occurs, did the danger arise from the excessive "dynamization" of an infinitesimal dose, or from the injudicious or fraudulent use of a really large dose? If medicines have their potency magnified in proportion to their attenuation, and again increased by shakes or trituration, it would seem to be much

safer for Physicians to adhere to some standard dose, whose potency is understood and uniform. But does not every dose, great or small, undergo the shakes of peristaltic action?

The fact is, there is abundant reason to believe, that when Homœopaths give efficacious doses, they give those remedies which may be given in large *dose* and in *small bulk* at the same time.—Modern chemistry, by separating active principles from inert matter, gives facilities for a kind of practice which is legitimate in the hands of the regular Practitioner, but fraudulent in the hands of one who pretends to give the billionth of a grain, when he gives the 1-4 or 1-2 of a grain, as of morphia, or the 1-50 of a grain as of digitalin.

The infinitesimal dose then, so far from being proved to be efficacious, is a mere mockery. Hahnemann's theory about it and the "dynamization," &c., is treated with contempt by many of the Homœopaths; but they profess to adhere to the cardinal rule *similia similibus curantur*. This is the prime distinction of *Homœopathy* as the very name implies. Allow me to present the definition from a standard authority, with the brief comment which follows:

"Homœopathy. A fanciful doctrine, which maintains that disordered actions in the human body are to be cured by inducing other disordered actions of the same kind, and this to be accomplished by infinitesimally small doses, often of apparently inert agents; the decillionth part of a grain of charcoal, for example, is an authorized dose.

"So long ago as in the writings of Gregory the Great, there is the following remark: 'Mos medicinæ est ut aliquando similia similibus, aliquando contraria contrariis curet nam sæpe calida calidis, frigida frigidis, sæpe autem frigida calidis, calida frigidis sanare consuevit.'" (Dunglison's Dictionary.)

The reader will please notice particularly the sagacious summary of practice as stated by the great Pontiff, as I mean to recur to it.

How do Homœopaths come at the true remedies in accordance with this one-sided theory of theirs upon which their whole system rests; similia similibus curantur?

By observations based, as they tell us, on the action of drugs, or

poisons, upon the healthy organism. This seems to be pretty fair, but the results are not free from perplexity, when we come to find that such a medicine as the carbonate of lime, in such a dose as the decillionth of a grain, produces 1,090 symptoms, among which are itching on the border of the eyelids (after five days) and great heat at the extremity of the big toe (after twenty-one days.) It required the genius of Hahnemann to trace cause and effect between the dose and the symptoms. No *old school* physician, from Hippocrates to Sydenham or Louis, could have done as much.

The first principle, however, as well as the infinitesimal dose of homœopathy, is being assailed by the doctors of this school. M. Rapon, historian of the Homœopathic doctrine, who seems to treat Hahnemann, as does Dr. Sharp, with alternate blows and caresses, uses the following language:

"The law of similars is positive, but it does not constitute the general law of therapeutics. Medicamental substances may operate by the law of contraries; enantiopathy is as often in play as homœopathy—both are secondary and accessory modes. The great principle is the specificity, and the most important problem is not to seek the similarity between the remedy and the disease, but to find directly the specific appropriate to each morbid state.—Dynamization does not exist even where by many its importance has been greatly exaggerated. * * * * Infinitesimal doses have no marked action; * * * * our medicines may be administered without inconvenience in the ordinary pharmaceutical preparations, and the various allopathic remedies may be employed conveniently with them." (Histoire de la Doctrine Homœopathique—quoted from Renourd's History of Medicine.)

So far as this gentleman's views are concerned, it may be said there is not a Physician in the world who would not be glad to have and to use specifics for all diseases; the one great difficulty is to find them. But it will be observed that this distinguished *homœopath* fairly abandons *homœopathy!*

"The ignorance of allopathy is darkness which may be *felt*—and it *is* felt, witness the confessions of its most eminent professors." (Dr. Sharp, Tract No, 6.) What must we think of the confessions of his professors? His own statements, as well as

those of M. Rapon and many others, go to show that the founder of homœopathy was either a conscious impostor, or a self-deluded visionary and dupe! "Like master, like man," is not unlike the great maxim of homœopathy; and it seems to find abundant application among professors of homœopathic art.

I find this article growing upon my hands beyond reasonable proportions. The only apology, is that I am but giving the result of a search for light, where none is to be found, in a series of essays said to be of high character, upon one of the most important subjects that can occupy the mind of man, i. e., the treatment of his maladies. I have found but sophistry, bold assertions, and puerilities, set off with philosophic platitudes, which for the most part, have no bearing whatever upon the matter under discussion.—These last seemed merely intended to dazzle ignorant readers, who had never learned, or had forgotten, the elementary lessons of the natural sciences.

The cases given in illustration prove nothing, even if stated in good faith. How utterly trivial for instance, is the following example: A daughter of the doctor's complained of feeling sick one morning, whereupon he gave her some globules of ipecacuanha. Before breakfast was finished by the family, she came forward and ate heartily, saying "I feel quite well." Her mama asked her what she thought cured her. Her reply was this: 'if I thought that such medicine could do me good, I should think it was the medicine; but I suppose it was the breakfast,' having forgotten that before she had taken the medicine, she was not able to take the breakfast." This is the opening of tract No. 12, on *The common sense of Homœopathy*. Other kinds of common sense have known children, in instances beyond number, to complain of feeling sick and to eat a hearty meal immediately after, without the aid of medicine—homœopathic or allopathic.

But enough of this. Let me say in conclusion, that by the broad principles of medicine, in its fullness, there is nothing to prevent any Physician from using remedies upon the homœopathic principle, or in infinitesimal doses, when and where these may be proved to be of proper application and utility. If the billionth of a grain of quinine will cure intermittent fever, let all the doctors

rejoice and be glad, for then there will be no danger, as at present, of exhaustion of the supply. That such a dose ever has cured such a disease, remains to be proved. But there are very wonderful things in nature and in art; as e. g., a man may be purged simply by polling a piece of iron at him. Speaking of the magnet, the touch of which produces 900 symptoms according to Hahnemann, Dr. Sharp, in opposition to his master, makes the following statement: "I have tried them (magnets) upon my own person, and on that of others. It is true that in one instance, in an individual of a highly nervous and susceptible temperament, I did get some symptoms, such as rumbling of the abdomen, a feeling of faintness, and a speedy action of the bowels; but then, on repeating the experiment with the same person, a few days afterwards, with a similar bar of unmagnetised steel, I got precisely the same effects; clearly proving that the results of the previous trial were due to the force of imagination, and not to that of magnetism." (Tract 9, p. 18.)

It is not improbable that patients in Tartary and Thibet are often cured by swallowing a piece of paper with the name of the proper medicine written thereon, which, as we are informed by the Abbe Huc, is in accordance with the practice in those regions; and it is not unreasonable to suppose, that "a billionth of a grain of charcoal," inscribed upon a piece of paper and swallowed, would prove, in any case, as remedial as the dose itself.

A billionth of a grain of quinine might arrest a chill, if given with due form and gravity, but a billionth of a drop of aqua fontana, would probably, upon the same, or a like individual, have the same or a like effect, and yet aqua fontana, as you may assure your readers, if any of them are not aware of the fact, may be taken in large doses, say a half pint or more, several times a day, without any danger whatever, except under extraordinary conditions or circumstances.

I have but recently, withal, heard a homœopathic patient complain of the bitterness of the medicine given him by his doctor to cure chills. Is quinine bitter to the third or thirtieth dilution, or, in practice, does the doctor adopt the allopathic heresy of giving ponderable and sensible doses?

Now a word upon allopathy. Physicians should reject this term

which homœopathy affects to confer upon regular practice. Do they admit any uniform or universal rule by which they, too, are bound to a one-sided theory? Who has a right to pledge us to the one axiom, contraria contrariis curantur? No one. The true Physician endeavours to know the essential nature of disease, its various characters, and the best mode and remedies for the treatment of disease. It is no leading consideration with him as to whether remedies act by any rule of similars or contraries, such things being very often mere empty speculation. The apophthegm of Gregory was just when expressed, 1200 years ago, is now, and will be to the end of time. Homœopathy expresses a sectarian limitation, which governs, or is supposed to govern, its followers; there is no rival sect of allopathy, although Physicians may, and do upon proper occasions, use remedies upon that principle, as when they oppose ice or cold water to inflammation. But does this application of ice ever prevent a Physician from applying hot fomentations, for example, to such forms of inflammation as may be benefitted by them? Certainly not. Away then with allopathy! If there be exclusive allopathists they are not much better than exclusive homœopathists.

Please allow me still the privilege of one or two more observations.

Homœopathic science rather avoids giving name to diseases, but sometimes condescends to name them, to show the advantage of homœopathy over what is ignorantly, or impertinently, called allopathy. I had a case in point some time ago. A gentleman called upon me to attend his wife who was ill, he informed me, with peritonitis. The lady, he said, preferred a homœopathic practitioner, as one of them had cured her of this formidable disease upon two separate occasions previously, by the infinitesimal doses. The husband, however, prevailed upon her to see me, as a personal friend of his, &c. I went accordingly, and found upon examination, that in the first place there was not a trace of fever, and in the second place, that the lady flinched and cried out with a nervous shriek as soon as the abdomen was touched, and before any pressure was made whatever. I soon had the pleasure of assuring the husband that his wife was as free from peritonitis as himself, and that she

would shortly be relieved, as indeed she was. Thus we see, that false names, as well as false doses, are used to bolster up false science.

Finally, I have only to say that the whole world is always taking what is, according to the homœopaths, medicine, or poisons, in the form of phosphorous, sulphur, iron, lime, and many other elements or compounds, every day during one's whole life, from birth to death; and the constant reception of these things in infinitesimal or considerable doses, is utterly unavoidable. If homœopathy were anything like the expression of a universal truth, we would be constantly charging our systems with potential poisons, and their reäctions among each other, as we take them in our daily food and drink, would be fearful to contemplate; but happily nature, or nature's God, is wiser than Hahnemann and his followers, so that these alleged poisons, in infinite dilutions and triturations, are but innocent, and for the most part, essential elements of nutrition.

It may be said of the system of homœopathy, that "whatever is in it that is true is not new, and that whatever is new is not true," with perfect justice.

ART. II.—THE CATACLEITIC METHOD OF TREATING GUN-SHOT WOUNDS. By MIDDLETON MICHEL, M. D., Charleston, S. C.

The spontaneous healing of Gun-Shot wounds by first intention, or without suppuration, is eminently suggestive of some plan of treatment, whereby we might hope to imitate nature's own process in the accomplishment of so rare an event. The effort would not so often have proved abortive, but for the impracticability of establishing the conditions upon which so unexpected a result seems to depend.

Our predecessors, not generally acquainted with the posibility of this mode of termination in the class of cases described as contused or lacerated wounds, nevertheless, in their efforts to expedite a cure seemed unanimous in their belief, that the best means to effect this

purpose would be to address themselves to two principles of practice: the exclusion of air from the wound, and the close apposition of its opposing surfaces; which came to be the general practice, enjoined by most surgeons of repute, particularly in injuries about the cranium, face, and neck, a procedure which also avoided cicatricial deformities and their subsequent contractions. In highly vascular parts, in this region of the body, whose vitality is not easily impaired by the most extensive injuries, immediate union frequently takes place; but the difficulty in ordinary gun-shot wounds consists in the extensive disorganization of the tissues, by such a missile as the conical ball, which makes these wounds very unlike those inflicted by the tenetome in subcutaneous operations. In these, the instrument most frequently only compromits the loose cellular tissue, tendons or muscles by a regular incision, and whatever effusion of blood occurs, its absorptive destruction is readily effected. Indeed, researches into the mode of repair after subcutaneous operations have taught us, that, not only is there no laceration or contusion of the parts, but that little or no blood is effused; the products of exudation which infiltrate the breach of continuity, differ scarcely from the exhalations of serous surfaces, and this plastic lymph readily organizes a formative element for the development of such low grades of gelatinous tissues as cellular, tendinous, and osseous. Such a blastemal element as is here produced, speedily regenerates such tissues through its granular contents, while the presence of blood in any quanitity would only interrupt the process by exciting irritation and even inflammation. Whereever immediate union of this kind occurs, it is always accomplished absolutely without any degree of inflammation.

But it must be rare, indeed, that the minie ball wends its way between, rather than through the structures; separating instead of dividing or lacerating them, which would constitute the only condition for apposition of the walls of the bullet-track, and insure the least amount of sloughing. Such results occurred, probably much more frequently when the round ball was in use. Even where so fortunate a propriety of occurrence exists, and the orifices of gun-shot wounds are occluded by scabs, they still only affect a resemblance to the condition of subcutaneus wounds, for the tissues must suffer

a certain degree of contusion and laceration; blood also is effused, and though much of this fluid may become organized as in primary adhesion, or what is called "first intention," yet it exists in sufficient quantity to beget a certain degree of inflammation, not so ill-defined, but that redness, pain, and swelling, are always present to some extent.

Now the healing process of such a wound, however rapidly it may be accomplished, is very different from the repair of subcutaneous injuries, for it must take place in some portions of the track by granulations. A knowledge of the reparative process predicts what must occur during the first few days in all such wounds, prior to the production of pus: a cellular blastema elaborates a mass of spongy outgrowth; through these are tunneled anastomosing blood-channels with regularity, and during this period of tranquil histological labour, unperturbed by inflammatory intrusion of any kind, but which lasts only twenty-four or thirty-six hours, these vascular structures, of new formation, may unite by "primary adhesion" or the "modelling process, if the surfaces be brought into apposition, and a continuance of healthy action is ensured—as by the avoidance of motion, and observance of the strictest diet. This healing, by the "modelling process," may take place, provided the granulations are of healthy formation, and no determinate amount of pus is interposed, which latter circumstance is not likely to occur when the parts are early brought into juxtaposition, and all air is excluded from the wound.

This is no recondite speculation, no hypothesis, when we remember, that in a hare-lip operation which failed, Hunter left the wound open to granulate, and then, prior to the presence of pus, united it again with needles, in the ordinary way, and had the satisfaction of obtaining union at once. Mr. Paget states that a similar course pursued by Messrs. Stanley and Skey was followed by complete success after an amputation of the thigh, and again after another operation for fissure of the soft palate.

Whatever disintegration of tissue takes place in the way of slough, may be disposed of by molecular absorption.

In other situations, the paring of the edges of the wound, and subsequent occlusive dressings, by which all air is prevented from

entering the wound, were resorted to, not only to hasten cicatrization, but in order that the effused blood should, by coägulating, compress the surfaces of the lacerated track, arrest hæmorrhage, promote absorption, and prevent or lessen suppuration.

This plan, somewhat modified, and to which we have given the name of Catacleitic method, was the plan of treatment from a remote period in injuries of the chest, and it seemed instinctively suggested by the alarming hæmorrhage, which so often supervenes; and was also recommended on the physiological supposition that the introduction of air into the pleural cavity causes collapse of the lung. Even when emphysema threatened to interfere with the normal exercise of the functions, Larrey pared the edges of a chest wound in a Polish officer, uniting them with sutures, and permanently occluding the orifices by a dressing, which was not removed until the patient recovered. But so far back as 1772, Valentin practiced and advocated the same procedure, as the only safe course in penetrating or perforating wounds of the thorax. We are, therefore, surprised that we should hear of this plan as a new, and recently proposed American method of treating chest wounds, which Ambroise Paré recommended even before Valentin.*

Baron Larrey, in the campaign of 1812, pared away the contused edges of the wound, dissected up the healthy skin, brought the surfaces together with sutures, and rendered the dressings permanent and immovable; applied a coating of the white of an egg, and general pressure upon the surface. He especially enjoined that the apparatus was not to be disturbed, until the twentieth day, when union will be mostly, if not altogether effected. So particularly does he insist upon an undisturbed condition of the appliance, that all other incidental complications are to be met, and treated in the ordinary ways, and should symptoms of suffocation, from accumulations ensue, he recommends the operation of thoraco-centesis in preference to the removal of the bandages; thereby endorsing the valuable precepts of Valentin, and others.

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*Hermetically Sealing Chest Wounds. By Ass't. Surg. B. Howard. Mr. T. Longmore, Deputy Inspector General, very properly remarks, in his strictures on this subject in the "London Lancet," that "hermetically sealing, thus applied, is only a new term; the practice is not new."

Indeed, occlusive dressing—recently termed "hermetic sealing"—of all kinds of wounds, with the view of promoting or realising speedy reünion, has been long familiar to surgeons. In commenting upon this subject, I cannot forbear citing at length, and in the original, the wise and eminently practical precept of the old French surgeon, whose extensive experience, and honestly recorded observations, render his didactic writings, even in this day, one of the safest and richest wells of surgical erudition. Boyer indites these remarkable lines, in connection with the treatment of contused or lacerated wounds—"Quelles que soient les différences qu 'offrent les plaies contuses, toutes les fois qu'elles sont simples, et même lorsqu 'elles sont compliquées de corps étrangers dont on peut facilement faire l'extraction *elles doivent êtres reunies immédiatement ;* car, quoique leurs lèvres n'aient pas cette régularité qu'on observe dans les plaies faites par instruments tranchants, et que les parties vasculaires et autres qui aboutissent a leur surface aient éprouvé une contusion plus au moins grande, l'expérience journalére démontre qu'elles sont susceptibles d'agglutination, et que souvent elles guérissent par première intention, c'est-à-dire sans suppurer. * * * * Par ce procédé, on accélère singulièrement leur guérison, et l'on obtient une cicatrice bien moins apparente que si, les abandonnant à la nature, on n'en obtenait la guérison que par voie de suppuration."

In the campaign of 1812, Larrey advocated this plan, which Blaquière revived in 1815, and Velpeau informs us that Maréchal made a fortunate application of it at the Necker hospital in the treatment of all wounds; while Sazie has published a record of his observations respecting this point, which attracted special attention.

In England, Baynton's system of strapping wounds was very generally known prior to Chassaignac's elaborate paper on "Occlusive Dressings" of all descriptions, addressed to the Academy of Sciences in 1844. Chassaignac constructs a shield over the wound, by imbricating strips of adhesive plaster laid across one another like the branches of the letter X, which he established as a permanent dressing, excluding all air, and not to be disturbed even should suppuration occur, as he compresses the whole apparatus by a bandage.

He cleanses away any effete products with a spirit lotion, or water mixed with lemon juice, strengthening the appliance wherever it may give way, with additional strips. This treatment Chassaignac applied to lesions accompanied with laceration of muscles, to amputations, resections, burns, bites of animals, etc., and enforces the precept by claiming for his method, the following results: 1st. The immediate diminution of traumatic pain in almost all cases. 2nd. Absence of traumatic fever in the majority. 3rd. Diminution of suppuration. 4th. Prevention of the irritation and numerous other inconveniences attendant upon the daily exposure of the wound for the purposes of renewing the dressing. 5th. The much greater rapidity of the cicatrization, due to the amelioration in the character of the suppuration, the diminution of the inflammation, and especially the keeping the edges of the wound on a level with the surface.

We purposely review the literature of this subject, to exhibit to what extent, and for how long a time surgeons have been acquainted with what has been termed most inaccurately, "The Recently Proposed American Plan of Hermetically Sealing Chest Wounds."

Assistant Surgeon B. Howard, of the United States Army, while in camp on the Rappahannock, Va., prepared for the September number of the "American Medical Times," a description of his manner of operating, which we transcribe in his own language, in order that the similitude, in every particular, to Larrey's operation on the Polish officer, and Chassaignac's occlusive dressing, may at once be recognized. He says: "All accessible foreign bodies, having been removed, introduce the point of a sharp-pointed bistoury perpendicularly to the surface, just beyond the contused portion, and with a sawing motion, pare the entire circumference of the wound, converting it into a simple incised wound of an elliptical form. Dissect away all the injured parts down to the ribs, then bring the edges of the wound together with silver sutures, deeply inserted at not more than a quarter of an inch apart, secure them by twisting the ends, which are then cut off short, and turned down out of the way; carefully dry the surface and with a camel's-hair pencil apply a free coating of collodion over the wound; let it dry and repeat it at discretion. For greater security, shreds of charpie

may now be arranged crosswise over the wound, after the manner of a warp, and woof; saturate it with collodion, and when dry repeat the process, until the wound is securely cemented over. As a still greater protection a dossil of lint may then be placed over the part, and retained with adhesive straps."

To allay inflammatory swelling, cold affusions are recommended. The sutures must not be removed until healing by first intention is complete. And dyspnœa induced by suppuration, must be treated as empyema, with the trocar, at the most dependent points, taking care to avoid the admission of air. Valentin and Larrey, both practised thoraco-centesis under these impending circumstances; though Ambroise Paré, Guthrie, and others, reöpen the wound and allow both blood and pus to escape freely. The same course is pursued by all writers on chest wounds, and is strongly brought forward by Macleod, in his "notes on the surgery of the war in the Crimea."

In my report on the spontaneous healing of gun-shot wounds, read before the Association of Army and Navy Surgeons, in November, 1863, part of which was published in the July number of the "Confederate States Medical and Surgical Journal," I particularly recommended the paring of the edges of gun-shot wounds generally, uniting them with silver wires; which ought to be the course pursued, especially in injuries about the face, neck and chest, and which I still think, promises success in properly selected flesh wounds, in any part of the body; particularly if the paring of the orifices of entrance and exit be consorted with moderate compression of the entire bullet track by a well applied roller bandage, bringing the surfaces of the wound in all parts of its extent into juxtaposition, for we hereby promote molecular absorption, and are more likely to arrest whatever oozing occurs from divided vessels. Should any important vessel be injured the application of pressure by a bandage can do no harm, but seems absolutely indicated as the surest means of facilitating the production of a clot in the mouths of the opened vessels; but if neglected, though the wounds may heal by immediate union, we do not secure the patient against the production of a circumscribed or even diffused traumatic aneurism. Such an accident occurred in a case under my care, in which the

Huntarian method was followed by a happy and speedy recovery; the brachial artery was wounded just below where it gives off the superior profunda; the wounds were at once united by sutures, and they healed by first intention, but a traumatic aneurism resulted sometime after, which compelled me, when the patient came under my observation, to ligate the axillary artery in the arm-pit. The patient recovered.

In this connection, at least, we cannot subscribe to the advice Mr. Guthrie gives field-surgeons, "to carry no roller bandages into the field, but if they must take something as a substitute, they had better carry candles, which are of more service, while bandaging wounds always does harm." Such is the advantage of moderate compression, that we would even entertain the hope of controlling the development of aneurismal tumours, where these are to be expected, by pressure moderately applied and steadily kept up after the complete occlusion of the orifices of the bullet track.

During the recent war, we received several communications from the field, in which our friends declared that in their experience cicatrization was greatly promoted by simply bandaging the limb; and with regard to the advantages derived from paring and stitching wounds about the head, face and neck, we have both verbal and written communications from Surgeons J. Evans and Roemar, testifying to their successes. I should judge, however, that the occlusive method of dressing wounds of all kinds, especially contused injuries, must have failed in surgical experience, since a mode of treatment so long known would have come to be generally accepted with accredited authority, for time would have gradually corrected the inaccuracies or exaggerated promises of the plan, and through the assiduity of its advocates, or the scrutiny of its adversaries, the method would have been perfected.

Though the verdicts of surgeons would appear to be against this general course in accidental lacerated wounds, such as are met with in civil practice, or such as we find fragments of shells or the minie ball produce in military surgery, yet we entertain hopes of a successful result in certain gun-shot wounds of a superficial character, in which there is comparatively little injury inflicted, and where the admission of air can be promptly avoided; not that air is ever

injurious to living tissues, for it is not from apprehension of this kind, that we labour to exclude it, but because it favours putrefactive decomposition of the secretory products.

We know but little of the histolytic changes which the tissues, such as fibrous, muscular, and osseous, undergo in their retrogressive career, especially where this occurs through sloughs retained within deep and devious wounds. While much of this effete organic material may be absorbed, as it is in the vital process of molecular decay, yet it may exist in too large a quantity to be innocuously disposed of in this way. It occurs to me, therefore, without any observations, of which I am cognizant, to sustain the supposition that it is not inconsistent with what we know of the process of reproduction and repair, to presume that in the descensive metamorphosis of so much organic matter, some of it may return again to the primordial form of a granular or amorphous substratum, cover and defend the approximated surfaces of an extensive breach of continuity, and assume the progressive stage of a nubleated, or cellular blastema. Through such agency repair would then be effected in one portion of the wound, where immediate union may not have occurred, by primary adhesion, without any connective medium of blood; or in another portion by what Macartney has termed the "modelling process," which is healing by granulations meeting from opposite sides, before the reparative exudates, by the contact of air, have undergone degeneration and transformation into pus.

Though the effusion of blood, contrary to the opinion of Hunter, participates in no wise in the reparation of ordinary wounds, yet, when the wound is closed early, that is, within three to six hours, or much sooner, even should blood be then extravasated in limited quantity, being within a closed sac, as it were, it may assume the appearance of a felt-like mass, and becoming fibrillated, indicate that the fibrin is so far organized as to share in the process of repair; its vital endowment being a disposition to spontaneously evolve the very fibrous structure by which muscular tissue is alone repaired or reünited.

Surgeon J. H. Chisolm has, in a recent number of the "C. S. Journal," (September,) once more drawn attention to this point, and though the experiment has not been tried on a scale, such as to

warrant our drawing a determinate conclusion as to the value of the procedure, nevertheless, the Surgeon General furnished us with instances from the Army of Northern Virginia, through his Medical Inspector, Surgeon R. F. Breckinridge, which we now proceed to analyze.

The prejudice which exists against abruptly closing a wound, which ought to, and therefore it is believed must suppurate, has permitted but few to test a question so much insisted upon by Mr. Paget.

Those whose opinions we highly value, are not averse to the method, and Surgeon J. L Cabell of Charlottesville, Va., whom we take always pleasure in citing, thinks that in some cases this desirable result may be effected, though he has not had the opportunity of trying it in recent wounds. Surgeons M. Bellinger, P. G. Robinson, L. V. Hurt, J. L. Buist, and M. L. Thomas, respectively of Bratton's and McGowan's Brigades, Flanner's Battery, 1st Artillery corps; and Perry and Finnegan's Brigades, have been the first to report their experience; since when A. H. Powell, J. W. Claiborne, A. B. Snell, T. S. Trice, D. S. Bayle, and L. C. Warren have added theirs.

Those gentlemen collectively report 22 cases, all of which were produced by the minie ball, and possessed all the elements conducible to a favourable termination, being simple uncomplicated flesh wounds, except three. In one of these the ball entered the neck about two and a quarter inches above left sterno-clavicular articulation, opening the trachea, passing backwards and downwards to an exit one inch and a half above right clavicle; hæmorrhage, dyspnœa, and the passage of air through both orifices occurred. The wounds healed slowly, and recovery was effected in three weeks. These wounds were hermetically sealed six hours after the accident, when all bleeding had ceased. In another the bone was implicated; this was a wound of the right elbow— erysepelas supervened. The other was a chest wound—date of furlough unknown.

All these operations were performed on the same day of the receipt of the injury, and a few hours after they reached their several Surgeons.

As Surgeon Breckinridge observes in his enlightened remarks on

this subject, in eight of the twenty-two cases, there is no hint of the final result; the cases are reported, the nature of the wound described, the operation, and its date given, and there the history abruptly closes. Deducting these, we have fourteen remaining; but of these five are incomplete, the patients having been sent to General Hospital, from which they were furloughed at varying periods, without further report. Of course the record of even these few cases will scarcely permit of an opinion as to the time involved in the cure.

Delay necessarily took place in such as were complicated with erysipelas, hæmorrhages from the lungs, and injured bones in the neighborhood of joints; in nearly all cicatrization took place in less than six or eight days, accompanied with swelling and pain along the track of the wound, and even in the most favourable cases healing by first intention did not occur at all.

Thus private H. F. H., Co. A, 1st S. C. Infantry, was wounded through right gastrœmius, the track of the wound being only four inches long; operated on three hours after the injury, the stitches were removed on the fifth day, when the orifices gaped, and pus escaped. It was thirty days before he was returned to duty. He states that a large abscess supervened.

A flesh wound of the back required ninety days before it healed. A flesh wound of the thigh also recovered in nine days. One through the deltoid in (one hundred and twenty) days; one through left arm did well for five days, when the sutures gave way, and the wound healed by granulation. Another flesh wound through upper third of thigh is reported as having recovered in fifteen days.

In one, at the middle third of the thigh, the wound of entrance took twelve days to heal, that of exit was not then cicatrized; at the end of twenty-five days he had recovered. In the nine completely recorded cases, suppuration, profuse, and persistive, delayed the recovery of three cases, for ninety and a hundred and twenty days, respectively, accompanied with swelling, pain, and high inflammatory fever; in another, by the fifth day, the wound was "throbbing, and more painful than at any time since its reception," it eventually bursted and discharged continuously for three months, when the patient was returned to duty.

After five days in another of these cases, the stitches give way, the wound gaps open and heals by granulations.

There appears much variance of sentiment among the above mentioned Surgeons respecting this matter. Some hardly admitting it to be a legitimate mode of Surgical interference; others restricting it to simple flesh wounds of a superficial character; while none seem to entertain the idea of its applicability in any form of injury in which there are serious lesions. Chief Surgeon Stevens, of Gen. Gordon's Division, is among the very few who have ventured to speak favourably of the method; this gentleman writes that "it appears plausible and may be productive of beneficial results."—Surgeon Royston, Sr. Surgeon Alabama Brigade, says that "in favourable cases an apparent cure is more speedily effected than by the ordinary mode," yet he believes that men are not "fit for duty" any sooner.

But in an experimental inquiry of this kind we must solicit as many *facts* as possible, by multiplying our opportunities of testing the operation, in every quarter of the field; judiciously selecting flesh wounds, and carefully removing all foreign bodies, by even syringing out the track with tepid water, until we have eliminated all loose particles of tissue in the general drift of a cleansing stream. After the paring of the wounds of entrance, and exit, it is of all importance that silver wires be used. The introduction of thread sutures will in no wise answer under these peculiar circumstances. If it be difficult or impossible to procure silver wire, large sized, ordinary needles should be used, with the twisted suture as a retentive means, for these may easily be removed whenever the progress of adhesion renders their retentive agency of no further use. Needles are particularly adapted to the wounds of which we write, for after the thorough paring of contused parts, it is but rarely that we can approximate their edges, without such tension as even silver wire can resist. But when laxity of the tissues admits of easy adjustment—to meet the exigencies of field practice—a very efficient means is always at hand, in a material as unabsorbent, secure and unirritating as the best annealed metallic wire. This is found in *horse-hair* sutures. These are so easily procured, and require so little preparation as to constitute a great acquisition on the battle-field.

Experiments in the hands of MM. Paget and Thos. Smith, have shown horse-hair sutures to be perfectly suitable to the reüniting of all wounds, remaining, as they do, indefinitely long in contact with the parts, without undergoing any change whatever, and presenting wonderful advantages over metallic wires, in the facility with which they are subsequently removed, without rending or tearing open such adhesions as may have been formed. These facts have been so clearly established in the investigations of the writers just mentioned as to suggest the extensive employment of horse-hair sutures upon the battle-field. We have only to select the strongest hairs from the horse's tail and moisten them with a little water to give them the suppleness required, when two or three knots are all that is necessary to secure them.

I would apply nothing to the incised bullet wounds, which could possibly stimulate or pain. Collodian seems not as appropriate as a thick solution of starch, or gum arabic, which being diaphanous does not interdict the inspection of the wound. Then apply pressure along the bullet track as lightly and dextrously as possible, taking care not to encumber the parts with heavy investments either of lint or compresses, which being inimical to adhesion, inevitably promote suppuration. We must, on the contrary, suppress the reäctionary or inflammatory process, by every means at our disposal—the cold water dressing along the track of the wound being the most efficient local remedy; for it must be remembered, that absorption in many of the tissues is incompatible with inflammation.

Should the nature of the injury prove afterwards unadaptable to this mode of cure—should heat, redness, pain, and swelling, be complained of, admonishing us that too much inflammation exists to allow of primary adhesion—the needles ought then to be removed, to avoid the too rapid cicatrization of the orifices, which would possibly be followed by burrowing abscesses, pyæmia, or erysipelas. Such accidents would likely occur where there are many lymphatics or large glands associated with loose connective tissue, as in the axilla or popliteal region, particularly where this mode of treatment is resorted to many hours after the infliction of the injury. We were invited by Surgeon Magill to see G. T. W., private of 8th Louisiana regiment, Co. E, upon whom he had operated by this

method fifty-two hours after the accident. Wounded through popliteal region on the 25th of March, he was taken immediately to Confederate Hospital in Petersburg, and the next day to Dunlap's Crossing, reaching Richmond on the 27th. On the 30th there was no swelling of the knee or thigh, but on the 31st the calf of the leg was somewhat distended and painful, as though pus was forming in this situation. I have been informed that since my visit to him, the sutures were removed from the orifice of exit, and pus was discharged in considerable quantity. An abscess was largely developed in the calf, and he died of pyæmia, April 17th, three weeks and two days from date of injury.

But even when cicatrization fails, the entire wound is in a far more favourable condition for undergoing the only remaining curative process; for one orifice may possibly have healed; and by pressure, however moderately exerted, for several days, we shall have lessened the area of the suppurating surfaces, and have suppressed, to a great extent, the interposition of coagulated blood.

But there are other, and more important advantages to be gained, than simply accelerating the cure of a gun-shot wound, and returning the soldier promptly to duty.

In certain injuries about the wrist, where a number of tendons are intimately associated, beneath so limited a space as the annular ligament, a prolonged suppurative process, irrespective of its danger, terminates always in the consolidation of these organs in one matted mass, preventing effectually either their separate or combined actions. The hand, thoroughly deformed by unavoidable flexions of some or all of its fingers, is rendered absolutely useless, or even cumbrous. I have, on several occasions, been compelled, through the importunities of patients, to remove one or more of their fingers, tied down within the palms of the hand, signally and painfully interfering with the functions of the organ. These accidents are inevitable results of prolonged suppuration between and among retracted ends of divided and lacerated tendons, in opened wounds.

The solidification of the fibro-plastic exudates, constituting the inodulat tissue of the French; the organization of these inflammatory products, effused and infiltrated everywhere; the interposi-

tion of granulations displacing the distal and proximal ends of respective tendons; the invariable adherence of the skin to the tendons, where the wound is allowed to remain open until it cicatrizes, are accidents which should be objects of solicitude to the surgeon. All such difficulties should be cautiously considered in presence of gun-shot and shell wounds of so important a member as the human hand; and it is the imperative duty of the surgeon to try, within the time appointed for the success of the effort, to establish such relations between the injured parts, by his skillful intervention, as will tend to interdict the too frequent repetition of such deformities. In the vascular endowments of the hand, with its double arches, of anastomosing vessels, a striking similitude exists to the characteristics of structure, about the face and neck, whereby all breaches of continuity present a normal proclivity of repair. So remarkable is reparation, from the severest injuries in this extremity, that there are those who deem the ablation of the hand scarcely justifiable under any circumstances.

In subcutaneous sections of one, or all of these tendons, for liberation of the fingers or deflections of the hand upon the wrist, we never meet with this knitting-together and subsequent interference of functions; it appears to me reasonable, therefore, to suppose that striking results may follow an attempt to coaptate the parts and operculate the wound, placing it in the condition of a subcutaneous injury.

We should pare away the shreds of lacerated tissues, if it be a shell wound, and arrange, with cautious exactitude, each well trimmed nerve and tendon, so that it may lie in axial relation to its congener. The skin, dissected up and pared of all contused parts, may be slided over the wound and united by silver sutures, as in geno or melo-plastic operations. In the ordinary performance of this operation, we should circumscribe the contused margins only of the bullet wounds, particularly avoiding the removal of any of the healthy or uninjured skin, since the great retraction of the integument has sometimes made it difficult to reünite the wound, and maintain its borders in contact. This embarrassment occurred to me recently while ligating the radial artery at its upper third for intermediate hæmorrhage. After removing such speculæ of the

fractured radius as was deemed necessary, together with large portions of lacerated tissue, a too free paring of the skin made it difficult even with the loss of deep seated tissue to maintain coaptation when tumefaction set in: though imbricated slips of adhesive plaster secured the wound, and expedited the cure, yet there was considerable gaping. When, on the contrary, a sufficiency of flap remains, after a free dissection of the integument, to bring together the margins of the incision without too great a stress upon the silver wires, union occurs even under the most untoward circumstances. We recently performed a resection of the elbow-joint, removing the olecranon, and condyles of humerus, which was followed, almost immediately, by extensive erysipelas, involving the entire limb, and half of the body down to the pelvis, accompanied by delirium. The ulnar nerve was divided. On the subsidence of this complication, the entire wound, secured by seven silver sutures, which had remained undisturbed during the attack, was found healed through its entire extent, with motion and sensation unimpaired in both annular and auricular fingers. For a few days very little suppuration occurred between two of the sutures. Here it will be perceived, notwithstanding the extensive superficial inflammation of the skin, the wound held, in perfect contact by metallic sutures, underwent union without suppuration, for the small amount of pus which escaped, did not much retard cicatrization. I confess that I was quite surprised at the rapid termination of this case in perfect recovery under such unpropitious circumstances.

We need fear little inconvenience in paring the ends of nerves, even as large as the ulnar or radial, should they be compromitted, since it is well known, that several inches of large nerves may be removed without more than temporary suspension of their sensory and motory powers of conduction. They not only are reünited, but nerve tubules are subsequently formed and the conducting power of sensation and voluntary motion restored, sometimes within a fortnight, when simply divided; and within a year when as much as an inch has been exsected. The pertinacious recurrence of neuralgic pains, both in man and the horse, after resections of considerable pieces of nerves, has rendered even *neurotomy* a doubtful means of cure, especially among veterinary Surgeons. This fact,

again, determines the quickest method for the relief of *neuroma*, which is at once to resect the entire growth with its included or involved portion of nerve, instead of attempting the difficult dissection of the neuromatous tumour from among the divaricated nerve fibres often surrounding it.

It is the province of enlightened Surgery, to endeavour to supplant the adhesive process of second intention, by favouring the contraction and consolidation of some of these wounds by properly devised means.

No plan seems to fulfil the indications so pertinently as the one here described, especially when judiciously applied to individual cases promising success. As the method consists in *paring*, *enseaming*, and *operculating*, the orifices of gun-shot wounds—thereby locking them up, from the ingress of air, we have endeavoured to embody the idea of the entire process in the term *catacleitic*. In the absence of broader statistics than we are able at present to furnish, we are not prepared to endorse the opinion which will be generally entertained, perhaps, that these are the speculations of the cabinet rather than the experience of the field.

Basing our hopes, as to the successful results of the catacleitic method, upon what we have shown, rests on the recommendation of the highest authorities in Surgery, we look with increased expectations to the persevering efforts of those, whose large experience in the field (where alone it can be tested before reäction supervenes,) will afford ample opportunity for an enlightened criticism. We must therefore, for the present at least, resist all attempts at the propulsive ejectment of this method from legitimate Surgery.

ART. III.—INTERMITTENT FEVER, CAUSED BY A DISPLACEMENT OF THE SPLEEN, AND CURED BY THE ACTION OF A BANDAGE, WHICH MAINTAINED THE ORGAN IN PLACE. Translated from the French of M. Le Docteur Piorry. By WM. MASON TURNER, M. D., Philadelphia.

A woman by the name of Conquet, aged thirty-four, an Editress, living at 108 Rue St. Jacques, was, when she was twenty-two

years old, without any appreciable miasmatic cause, attacked with intermittent fever, which had not yielded since to any treatment, the displacement being to the left, and to the height of the splenitic plexus. During several pregnancies, the woman had not been free from the disease. Sulphate of quiniæ was for a long time employed in her case in the hospital, and the spleen, though *not hypertrophied, diminished sensibly*, but the attacks again recurred. It was only when the patient remained for a length of time in bed, (as she did during an illness from variola,) that she escaped the attacks of the disease. This state of things appeared to M. Piorry to be due to nervous changements in the splenitic plexus, which, in turn, produced displacement of the spleen. In this hypothesis, had he not known that the fever existed during the pregnancies, he would have diagnosed a distended uterus, which formed a solid floor, upon which the spleen rested.

M. Piorry had announced, soon after the entrance of the patient into the hospital, that the only means by which a radical cure could be effected, would be to keep the spleen in its proper place by some certain and fixed means. Or, when all other means had failed, to apply a bandage analogous to the hernial truss over the region. In this bandage was a movable cushion, fixed carefully, to be placed according to judgment, wherever it might be needed, and which would thoroughly support the spleen. The bandage was applied, and the fever *was at once suppressed.* The support was then taken away from the organ, and the *attacks at once returned.* After having worn this bandage for several months, Madame Conquet was able to walk to the station, and to attend to her business without any return of the fever.

[Full details of this case can be found in the *Gazette des Hôpitaux*, of 24th June, 1845.]

ECLECTIC DEPARTMENT.

"Floriferis ut Apes in Saltibus Omnia Libant."—Lucret.

I.—Aberrations of the Sexual Instinct.

The sexual instinct is one of the strongest forces for good and for evil. Its good effects are seen in happy family life, and a house full of healthy and creditable children. Its ill effects! Whatever things are done by men and women that are incomprehensibly foolish or criminal, there we may predicate that an aberrant or unsatisfied, sexual feeling lies at the bottom of the mischief. It is, we believe, for example, the chief origin of the secret drinking of respectable women.

Such an instinct deserves careful study, and we shall venture to lay before our readers an attempt at compendium of the subject viewed from a natural history light. The propositions laid down in the Marriage Service of the English Church seem to embody the common sense of the matter, wherein they state that marriage is ordained for three purposes—(1) the procreation *and* the due education of children; (2) the avoidance of incontinence; (3) the mutual society, help, and comfort of the married pair. Any union of the sexes in which provision is not made for fulfilling every one of these purposes, may be proved contrary to natural law, using that word in its widest sense.

Aberrations of the sexual instinct may consist, 1st in tendencies to sensual gratification without any union of the sexes, as in the "besetting trial of our boys," &c.; 2ndly, in union of the sexes without due provision for the ends for which such union was intended—viz., in casual and temporary union, of which *infanticide* is the necessary result; 3rdly, in marriages artificially barren, for which, as Dr. Storer and Mr. Hepworth Dixon testify, America is gaining a bad preëminence; 4thly, there are aberrations of a more innocent character, because often forced upon individuals by a wrong moral or political condition of society, amongst which we may include *androgynism*, if so awkward a word may be taken to mean the intrusion of either sex, voluntarily or not, into the province of the other; to wit, when a woman dissects a dead body, or a man measures a young woman for a pair of stays. To which may be added the many strange and fantastic modes of relation of the sexes—Free Love, Pantagamy, &c., &c.—which Mr. Hepworth Dixon shows us in his work on New America—and the Manichean notion that the union of the sexes is in itself sinful.*

(*) "All things in the world are said in some sort to seek the highest, and to covert, more or less, the participation of God Himself. Yet this doth no where so much appear as it doth in man, because there are so many kinds of perfection which man seeketh. The first degree of goodness is that general perfection which all things do seek in desiring the continuance of their being. All things, therefore, coveting as much as may be to be like unto God in being ever, that which cannot hereunto attain personally doth seek to continue itself another way—that is, by offspring and propagation."—*Hooker, Laws of Eccl. Pol.*, i. 5, 2; Keble's ed., vol. i, p. 216.

I. To begin with the first aberration. That it exists is enough for us. The extent of its prevalence is impossible to compute. Some men who have seen much of it, think it very common, and *vice versa*. That its effects are bad, no one doubts, but as to their gravity, considered quantitatively, there is, perhaps, exaggeration. Men who see nervous diseases believe it to be a frequent cause of those diseases. On the other hand, it seems to many of us that this is only another way of saying that persons of ill-conditioned nervous systems are prone to the aberration in question. If it be so common, as is sometimes alleged, it can hardly be so hurtful, or so difficult to abandon. One of the worst effects we have seen is that kind of hypochondriasis which afflicts young men who believe themselves the subject of all sorts of incapabilities and diseases which they read of in the advertising columns of newspapers. But then it requires no physical sin to produce this. When chastity is imperfect—that is, whenever young persons allow their minds to dwell on sexual ideas, and forget that the voluntary mental indulgence in ideas is in itself a sin, though followed by no physical act—then the reactions of an overstrained nervous system may lead to hysteria, hypochondriases, etc., in male or female.(*) To return, however, to the "besetting trial," etc. That it exists is certain, be its quantity or effects much or little. What are the causes and remedies? The causes may be purely physical. We have seen the habit frightfully developed in a rickety, large-brained child of two, from ascarides and eczema. It was got rid of by hygienic treatment, with circumcision. We have known of some cases in early adult life, which began from similar causes. In more instances, perhaps, it begins by vicious example. But we cannot conceive of any boys of ordinary intelligence, or who mix with older and worse boys and hear their talk, who would not recognize it as a sin. Now for the remedies. We are sure that the Rev. Dr. Pusey and Dr. Meadows agree in every word that Dr. Beale and the Rev. Mr. Thring adduce in favour of the preventive effects of muscular exercise, open air, cold bathing, and other modes of promoting honest, uplooking, open-faced habits of mind and body. Then there is the silent discipline, which guards against opportunities. Thirdly, considering the tender age at which there is a possibility of the sexual idea entering the mind—full ten years before, in our civilized and crowded state, there is any ordinary hope of marriage—we hold it to be the duty of every parent, in delicate terms, to warn his children before leaving home, against listening to nasty and prurient suggestions. He may fairly appeal to the boy's self-respect, and to the credit and purity of his home, and the precepts of temperance, soberness, and chastity, but in the quietest and least exaggerated way. Up to this point, we believe, too, that all parties are agreed. All parties are agreed, too, on the general good influence of sober religious feeling. But as to the question whether a special religious rite, such as confession, requiring for its efficacy a special mode of training, and

(*) See, on this point, Bayle St. John's "Life in a Levantine Family."

special articles of faith in the recipient, is to be recommended or not—that is no question for a Medical Journal. But we will venture to say that a self-reliant, self-respecting system, which inculcates resort to a spiritual adviser only in grave emergencies, and not as a matter of habit, is that which seems most suitable to the English. Other systems may or may not suit other people.

To complete this summary of selfish sensualities, we need only allude, in passing, to those dark crimes which, as the law says, are not to be named of Christian men, and which are shortly catalogued in the Epistle to the Romans, Casper's "Medical Jurisprudence," Gall and Spurzheim's "Phrenology," etc. They illustrate the dangers of unchaste thought, even without unchaste act. The man who gives reins to his thoughts may find his thoughts run away with him. The laws of habit, as regards chaste and unchaste thought, cannot be too sedulously inculcated on young persons.

II. *Incontinence and Infanticide.*—These we class together, as necessary accompaniments in a society where Christian shame has influence, and where unchastity is looked on as equivalent to want of character. Man and woman who run the risk of introducing homeless and nameless infants into the world—whom they dare not own or shelter publicly—are infanticides by omission, if not by intention. We give due honour to the Harveian Society for attempting the problem; but all their labour and ingenuity only serve to show the impossibility of protecting infants whose natural protectors are their natural enemies. Incontinence in woman is much a matter of race, of education, of the opinions of her daily associates, of opportunity, of mental training and character. Women of the Celtic race in their original abodes, not transplanted to towns, seem singularly virtuous, spite of the worst overcrowding and mixture of the sexes. What room in a London lodging equals the Highland or the Breton Cottage, or, we may say, the dwelling of any primitive race under heaven? To assume that overcrowding and want of privacy are causes of incontinence *per se* is to say that continence is unknown amongst such races; but in towns away from home associations, amidst a more stimulating existence, these conditions give both inclination and opportunity. Amongst large masses of the lower orders of Englishwomen neither is incontinence considered any harm, nor the getting rid of the child born or unborn. "So the baby is dead," we said the other day to a poor married women who was "nursing" her sister's child. "And a very good job too," was the reply. "Quid vanæ leges sine moribus?"

Where such are the sentiments, legislation against infanticide is vain. For one child that is killed, hundreds are let die, in some decent tedious way; gruel or bread pap made with water and coarse sugar will in no long time make the child fit for "the Lord to take it." Shut up the mother in a Workhouse for four months; can you make her suckle her child? No; she will starve it, if she chooses. A great state Foundling Hospital would be a perilous experiment; if tried it should be supported by a tax on unmarried men. Private benevolence can do

as it lists. The women in certain districts of Eastern Scotland and of England are frightfully unchaste. Poverty is not the chief cause: for in manufacturing towns young girls earning high wages habitually treat soldiers or keep men as paramours. Amongst the families of the wealthy, especially in towns, there is often a want of discipline; young female servants are allowed to "go out," and so fall into bad company. We know thoroughly well that amongst certain classes a woman thinks it no sin to give the last privileges to any one who promises to marry her. The main causes of incontinence in women may be summed up in want of self-respect and self-control, and want of insight into the heinousness of the offence, whether in a religious or natural history view. We have often said to a girl "in trouble"—See what you have done? You have let yourself be the means of bringing into the world a poor child, with no father to own it, no home for it, a thing to be kicked and scouted as a bastard; does even a bird or a beast have young ones without a mate?—without preparing a nest, and lining it, to protect the young, and doing her best to feed them? So we say to young men—do not pretend that nature prompts you to sin. "Nature," requires that the woman to whom you unite yourself should be protected and nursed in the troubles of childbirth; that the infant should be reared as becomes your son, and not be left kicking about the world. If "nature" requires you to run the risk of having a child, "nature" requires you to provide for it. Incontinence in man is in this country kept up by an unwritten code of immorality, whose force is greater at present than that of any Christian teaching which reaches the multitude. Neither are our young men taught early enough to look forward to, and work and wait for, the comforts of a suitable marriage and healthy offspring. They rather look forward to sowing their wild oats with loose women, and sobering down and living respectably another day. Then statisticians set to work to ponder on the extinction of noble families, and moralists pretend to wonder at the aberrations of wives who have married these sapless sticks.

III. Let us turn to an aberration of the sexual instinct more natural and detestable still, such as results in marriage without the fruits thereof. The man and woman desire the gratification of each other's society, but refuse the task which nature imposes of rearing the offspring which ought to result from this association. Such is the curse which luxury and the worship of godless intellect inflict on their votaries. We need not refer to the ill-repute of the French for the small number of children to every marriage.(*) It would be more astonishing to find

(*) Mr. Beresford Hope, M. P., in a speech at an agricultural meeting in Kent, said:—"It is a thing almost too dreadful to say, but I believe that the diminution of the population of France is a great deal owing to the fact that the parents don't like to see their land cut up into nothing, and, accordingly, we have families of three and four children only. Why only three or four? It is a dark mystery. Certainly human nature is human nature; but the maternal nature and the paternal nature are steeled in France to the desire of seeing many rosy infantile faces round their hearths. That is a known fact, and there are things which cannot be spoken of except very guardedly, and only in meetings of men, and I believe a

such a stain upon moral New England, were we not aware that though the smaller and better part of the Americans have a real affection for the mother country, yet that the great marjority are infinitely more French than English in tastes and predilections. Our readers know already that Dr. Storer and other New England Physicians have felt it necessary to lift up their voices against so gigantic an evil. (*) See, for instance, Dr. Storer's book entitled "Why Not?" (†) Unluckily the thing is not confirmed to Medical books. Mr. Hepworth Dixon, in that wonderfully interesting work entitled "New America," (‡) has gone into it without mincing matters. Writing at Providence, Massachusetts, [Rhode Island] he speaks of "a strange and wide conspiracy on the part of women in the upper ranks—a conspiracy which has no chiefs, no secretaries, no head-quarters, which holds no meetings, puts forth no platform, undergoes no vote, and yet is a real conspiracy on the part of the leaders of fashion among women."

And for what? Simply for the worship of self, for the enjoyment of all the luxuries of life, for the gratification of sense and intellect,

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great deal of it is attributable to that infamous system of the necessary division and subdivision of land and property among all the offspring. Marriages become a mere matter of bargain: the man has a third of his father's property, and the woman he takes to wife has a third or a quarter of a half of her father's property; and so it is simply a union of two misbroken halves put together. Sons' sons go on making these sorts of marriages, and thus you see how this villainous system poisons the very birth-springs of human life and human morality in every shape; and it is what we are to come to—equal division of land and universal suffrage. France got an equal division of land seventy years ago, and universal suffrage nineteen years ago. . . Freedom to make your money, freedom to spend your money, freedom to buy land, freedom to sell land, freedom to marry, freedom to make your will, freedom to travel, freedom to breathe, freedom to worship your God as you like, freedom in all things, with order and due subordination everywhere—(cheers)—that is the English system."

(*) "*Population in Massachusetts.*—Dr. Allen, of Lowell, has been investigating the changes in the population of Massachusetts, of which State he says that, in thirty or forty years, the native-born will be a minority. His figures show, not merely that the foreign population of the State increases more rapidly than the native, but that in fact the native population is diminishing year by year, and the increase is altogether foreign. In 1864 the births in the State were 30,449, and the deaths 28,723; in 1865 the births 30,249, deaths 26,152. The births exceeded the deaths in 1864 by only 1726, and in 1865 by 4097. But the foreign population have from two to three times as many births as the American, and it follows that the American deaths actually exceed the births. This is confirmed by the figures from towns where there are few or no foreigners, and the deaths every year exceed the births. Is the old Puritan stock losing its virility and running out? The town records show that in the first generation of settlers the families averaged from eight to ten children; in the next three generations from seven to eight; the fifth about five; and in the sixth less than three. The present is less than this. The old physicians all notice this falling off, and it is remarkable that it is quite as large in the country as in the city. Does it come from our more artificial and unnatural life, producing a degenerate physicial condition of women, or from a settled purpose with the married to have but few children? These are some of the questions raised by Dr. Allen. The facts deserve the attention of students of social science."—*Springfield Republican.*

(†) See *Medical Times and Gazette* for 1866, vol. ii, p. 479.

(‡) Published by Hurst & Blackett, 2 vols., 8vo, 1867. See vol. ii, p. 265, &c.

but without the trouble of rearing children. There is no secret affected about the matter. Young fashionable American women say they won't have babies, "in pious Boston and Philadelphia, no less than in wicked Orleans, and New York. It is an offence to allude to the nursery—to wish a young mother a return of the christening day." And they justify themselves.

"A woman's first duty," said one of Mr. Hepworth Dixon's lady friends, "is to look beautiful in the eyes of men, so that she may attract them to her side, and exert an influence over them for good; not to be a household drudge, a slave in the nursery, the kitchen, and the schoolroom. Children take up the mother's time, impair her beauty, and waste her life. If you walk down these streets" (those of Providence), "you will notice a hundred delicate girls just blushing into womanhood; in a year they will be married; in ten years they will be hags and crones; no man will care for them on the score of beauty: their husbands will find no bloom in their cheeks, no lustre in their eyes; they will have given up their lives for their children."

Of course this state of things tells upon the population.

"The only States," says Mr. Dixon, "in which there is a healthy rate of natural increase by birth are the rude Western ones. In Massachusetts, the religious centre of New England, the intellectual light of the United States, the young women marry, but they seldom have children. The women have made themselves companions to their husbands—brilliant, subtle, solid companions. At the same time the power of New England is passing over to the populous West, and a majority of the rising generation of Boston is either of Irish or of German birth."

That a state of things is an aberration of the sexual instinct, which sets aside the main end of sex itself, is clear, and it seems to have its root first in selfishness—in the desire to enjoy life without trouble; but it is greatly aided in America by that other sexual aberration, which seeks to put the sexes on an equality and identity as far as possible. Hence too great a stress on the intellectual, and too little development of the nutritive functions, in the American girls (in the Eastern States, not the Western.) "They have," said a friend to Mr. Dixon "no bone, no fibre, no juice; they have only nerves. But what can you expect? They eat pearlash for bread, they drink ice-water for wine, they wear thin shoes, tight stays, and barrel skirts. Such things are not fit to live; and, thank God, in a hundred years not one of their descendants will be alive." There is no truer instinct than that which leads men to admire a deep and well-formed female bosom. It typifies the calmness, the graciousness, all that is bland and bountiful in maternity. But big foreheads, flat bosoms, skinny legs, sharp features, coarse voice, and a strong taste for criminal statistics, are the true type of the "woman's rights" system. Many attempts have been made to introduce this accursed system of limited families into England; radical and philosophical politicians advocated it years ago; but, thank Heaven, we think that no English Physician would countenance it. We hear of it sometimes in private practice; ladies say, "I am having

children so fast—can nothing be done save separate beds?" We do know instances in which some experiments were made, which nearly maddened the wives subjected to them; but the heart of English society is sound.

IV. Lastly come we to a miscellaneous set of sexual aberrations, some arising out of unhappy social circumstances, some from wild political or religious opinions. Here we cannot help remarking how intrinsically, the security of all that we hold most precious depends upon a few religious opinions, so familiar that they seem to many of us mere commonplaces, things to be taken for granted. What a matter of course it seems for a man to be able to talk of *my* wife, *my* children, *my* land, *my* bankers' book, *my* mutton, *my* wine, *my* profession or business, *my* last will! Such privileges, however, really rest on our religious and political systems; and it is quite as well to be forewarned that there are systems of political philosophy which hold marriage with one woman to be exclusive selfishness, property to be theft, which deny the right to eat meat or drink wine, and to follow any special calling at will. In fact, the relation of the sexes is essentially connected with religion and politics, and varies as they vary. There is little of novelty in these extravagances. St. Paul describes them in three lines (1st Epistle to Timothy, chap, iv, verses 1—3), and every sexual and social heresy, now rampant in America, including celibacy, teetotalism and vegetarianism, and spiritualism, flourished amongst heretics, and was denounced by the Church, in the first centuries. One great value of Mr. Hepworth Dixon's book to the Medical philosopher and psychologist is, that it shows in time present a vivid picture of times past. We are apt to read of ancient extravagances as if they were mere dreams long vanished. The heresies which distracted the early Christian Church and the atrocities of the Anabaptists in the 16th century, what, we may ask, are they to us? A sleepy eye may sometimes light upon the 38th out of the 39 Articles of the English Church, wherein it is stated, in pedantic phraseology, that "The Riches and Goods of Christians are not common, as touching the right, title, and possession of the same, as certain Anabapists do falsely boast," and we may remember having read that there was a sect in the 16th century which proclaimed community of goods and wives, and which for a time was strong enough to propagate its opinions by fire and sword. Such madness, however, it is well to be reminded, spring from constant elements in human nature, and are sure to come to light at times of great political and religious excitement. Let us show from Mr. Hepworth Dixon their present rampant state amidst the unbridled license of opinion in the United States.

1. To begin systematically, let us begin with those who denounce marriage *in toto*. God, they say, is a Spirit; the flesh, with the whole material world, is subject to the devil. So also said the ancient Manichees, and herein lies the distinction between the ascetic and a Manichee. The ascetic believes in the sovereignty of God, and abstains from things—say marriage or wine—which he acknowledges to be good in

themselves,—*i.e.*, for discipline, because he believes that he individually may be better without them. The Manichee (*e.g.*, the teetotaler who raves about "cussed" alcohol) abstains because he believes them bad in themselves, and generated by, and subject to the devil. Let us see what Mr. Hepworth Dixon says of the sentiments of the American Shakers, a sect of devotees who abjure marriage, and live in communities, where they exercise themselves in horticulture and the preparation of vegetables. (It is to the Shakers that we owe podophyllin and other vegetable extracts of that sort). One of the female saints thus explained their tenets to Mr. Dixon:—"By lust man fell from heaven; by abstinence from carnal thoughts he might hope to regain his celestial rank. No form of earthly love could be tolerated in the Redeemer's kingdom. Men called into grace must live as the angels live, amongst whom there is neither marrying or giving in marriage. Every member of her church had been compelled to renounce his yearning after love; the wives consenting to dwell in a house apart from their husbands, the husbands in a house apart from their wives. They had put themselves this question—'If all men born into this world are born into sin, and made heirs of death in the world to come, how can the saint, when raised from his fallen nature, dare to augment this kingdom of sin and death?'" It must be added that the Shakers permit marriage to the outside world, but consider it a state unfit for saints, and that they have kept themselves free from the beastly practices ascribed to the Manichees of old.

2. *Free Lovers.*—It may seem a jump from one pole to the other, but we may as well take as the next item in our enumeration the persons who, having cast off all allegiance to the religion, philosophy, morality, and forms of thought of the past, openly advocate *free love*—*i.e.*, the union of sexes at will—who deny that marriage is a high, holy, or pure state; and say that a partnership in matters sexual ought to be like any other—*i.e.*, subject to such terms and conditions as the parties may be pleased to adopt, or to none.

3. *Spritualists.*—These are the personages who believe in that sort intercourse with inhabitants of the unseen world, which is carried on by means of table-rappings, mediums, etc. Part of their superstition is the belief in clairvoyance, and especially in the selection of remedies by their prophets and prophetesses. They denounce spirits and tobacco; declare Christianity to be an old effete religion; believe in a duality—*i.e.*, a fatherhood and motherhood—in God, and the perfect equality of the sexes on earth. As to the union of the sexes, they for the most part advocate free love.

4. Let us take the *Bible Communists*, or *Bible Families*, or *Perfectionists*—self supporting societies, the members of which have all things in common. They seem a degraded and distorted offspring of Antinominism. We abridge the following account from Mr. Hepworth Dixon, as the readiest to our hand, and as the evidence of the latest eye-witness:—

The Perfectionist has a right to do what what he likes. He will tell you that from the nature of the case he can do nothing but what is good. A Perfectionist knows no law; he does not live under law, but under God—that is to say, under what his own mind prompts him to do as being right. The Lord has made him free. To him the Word is nothing. No commandment in the ten, no statute in the rolls is binding on him, a child of grace delivered from the power of the law and the stains of sin. He rejects laws of God and of men—ten commandments, statutes at large, temperance pledges and marriage vows. Noyes, the founder, on his "conversion" gorged, and drank, and frequented low women, in order to show his freedom from law and obedience to grace. But how does a man arrive at a state of grace? Simply wish and believe it, and it is done. Good works are not necessary; prayers not desirable; only faith—then the man is law to himself.

To the well-informed English reader there is nothing new in all this; it is the same doctrine founded on the same texts of St. Paul as was propagated by the Rev. Mr. Prince, who twenty years ago was a clergyman at Brighton of "extreme views," which views culminated in the well known Agapemone, or Abode of Love. The only difference was that the English saints were people of easy fortune, who lived on their means; the Americans support themselves—and well too—by well organized labour. Both agree in the precept that it is a duty to eat, drink, and love to their hearts' content—wives and children to be common, as all other property. They have a sort of domestic government, inasmuch as every member pledges himself to abide by the will of the majority.

Their tenets and customs as to sexual alliances may be gathered from a passage in a proposal of marriage made by Noyes, the founder, at the very origin of the institution: "We shall enter into no engagements that will limit the range of our affections as they are limited in matrimonial engagements by the fashion of this world. I desire my yoke-fellow will love all who love God as freely as if she stood in no particular connection to me."

The relation of the sexes is described by Mr. Dixon as a "complex marriage, including the marriage of every member of the household to every other of the opposite sex: every man becoming the husband and brother of every woman, every woman the wife and sister of every man. Marriage as a rite and a fact have they abolished as a selfish and exclusive institution."

One little bit there is in these family arrangements which fills one with admiration at its astuteness. One of their sexual rules they call by the name of the "ascending fellowship," which means that "the young are to associate in love first with those older than themselves," with "spiritual" persons who have been some time in the way of self-control. Another rule is, that no "exclusive attachments" are permitted! Verily, here is a climax to the myth of the Pilgrim Fathers! Here is a development of intellect and liberty and the rights of man! Strange stories used to be told of the rights of feudal

seigneurs over the virgins of their domain, but that young men of English blood should allow the girls to "associate in love" at first with the old and moderate! and that they should renounce exclusive possession! Out upon them! we disown them as descendants of Englishmen. As for the children of these promiscuous alliances, we learn no particulars; but they seem to be common property—children of the regiment, as they say in barrack towns.

5. As the next subdivision we take the *Mormons*. We have not space to narrate their history. Suffice it to say that they are a band of religious enthusiasts who believe in a material God, and in the duty and privilege of enjoyment on earth. Their first duty is to live: the next, to enjoy life; the next, to increase the number of saints by propagation. In most secular respects they deserve high praise; they have converted a howling waste into a beautiful city and fruitful garden; they have raised more produce from a given breadth of land than any before them—even ninety-three and a half bushels of wheat from an acre; they have an orderly and contented population: drunkenness, beggary, and want are unknown amongst them; no loose women, pick-pockets, or drunken and blaspheming men are seen; they don't drink spirits and don't smoke; they live at peace with the Indians around; their bishops see that their houses are clean, their land well tilled, the children taught, and the cattle housed. "Amongst the Mormon presidents and apostles," says Hepworth Dixon, "we have not seen one face on which liar and hypocrite was written; though we daily meet with fanatics, we have not seen a single man whom we can call a rogue." They have even a pure theatre. But, amidst all this, they practise polygamy. Their excuse and pattern is the polygamy of the Old Testament patriarchs; their alleged reason, a wish to provide earthly tabernacles for immortal souls—their real one, to secure political power by rapid increase of population, and to lure converts by the prospect of unlimited sensuality. Hence every man is not only allowed, but encouraged as a duty, to have as many wives as he can feed. They repudiate the notion of "desires or preferences of the flesh," but set to work solemnly, as a duty, to increase the saintly kingdom. Brigham Young, the chief phophet, has about twelve wives, and about forty-eight living children. The "twelve apostles" have fifty-three wives between them. The highest dignitaries get the prettiest women. No woman is under any compulsion—she may marry or not as she pleases. They seem to admit no union to be incestuous, and deny the harm of breeding in and in. A Mormon may live with three or four sisters, with an aunt and niece, a mother and daughter; nay, in one household in Utah may be seen the spectacle of a man living with three generations as wives. Besides regular polygamy, they have a curious system of "sealing" women to men, by which is meant a mystical union for eternity. A woman may be sealed to a living man, and may or may not live with him as wife in this world; or she may be sealed to a man already dead, and may or may not cohabit with a living man as an earthly substitute. Thus a woman went from New York to be sealed by Brigham Young as one of Joe Smith's wives for eternity, but, that the field might not lie

fallow in this world, Brigham took her and had three children by her. Be it observed that most Mormons are of English or Scandinavian origin, and that nineteen-twentieths of the two thousand Mormon elders who solemnly accepted polygamy on August 29, 1852, were of English blood. Let it be added that it is only the rich and few who can afford polygamy; the great majority have no interest in it.

What, according to our oft-quoted authority, Mr. Dixon, is the effect on the women? A few female fanatics are in favour of it, but the majority really dislike it. The Mormon wives are dull and shy; they dress poorly, are quiet and subdued in manner, as if all life were preached out of them. They smile with wan and languid look, not with the bright and merry laugh of English girls. They are brought into the room to see strangers, as children are in England; there is nothing like ease and womanly bearing; no woman reigns as mistress in her own house, or sits by the side of her lord as mate and equal; she waits at table; her place is in the kitchen, nursery, laundry, or fruit shed, not the drawing-room. She is not the companion contemplated by the English marriage service, but a slave and toy—say, rather, a broodmare, a tool for propagation.

6. Having now gone the round of the grosser aberrations of the sexual instinct, let us come to *Androgynism* or the intrusion of one sex into the other's province. The funniest example of the intrusion of men into woman's field is afforded by the Chinese in the United States, who in California and the West do the work of women by preference—wash clothes, nurse babies, and do housework; but there, there is some excuse, for women are scarce. There were seven hundred and thirty thousand more men than women in the United States in 1860. In England we see men behind counters, keeping books, measuring tape, and doing a thousand acts which might be done by women, if the latter would condescend to the habits, the good temper, and precision necessary for business, which they seldom will. The most zealous promoters of employment of women groan over the unfitness of "genteel" English women for any employment whatever. Hence the intrusion of men into effeminate occupations is at present said to be unavoidable.

But the tide is turning, and now it is woman who is the aggressor. She demands absolutely equal rights with man; his pantaloons (*fem.* pantalettes) and latch-key. She demands admission to all offices and dignities, and that she shall have the privilege of doing all that man does. Woman in America, says Hepworth Dixon, "is thrown into a thousand restless agitations about her rights and powers, into debating woman's place in creation, woman's mission in the family; into public hysteria, into table-rapping, into anti-wedlock societies, into theories about natural marriage, free-love, and artistic maternity; into anti-offspring resolutions, into sectarian polygamy, into free trade of the affections, into community of wives." These moral phenomena have their starting-point in America, where they are ascribed by Dixon to the scarcity of woman; consequently to their power and self-consciousness of importance. The same phenomena are felt here, but as a conse-

quence of a diametrically opposite state of things—a superbundance of women, a want of husbands, a want of occupation and honourable maintenance for women of the genteel classes.

Now, of the evils of women, some are inseparable from their sex. Woman has the task of nourishing within her the future offspring, and if she fulfills her duties she nourishes the little one during the first nine months after birth. To perform these functions well, requires a large sacrifice of time, of health (at least temporarily), and comfort; it requires a frame in which the nutritive functions have a preponderance, and in which too great sensitiveness, physical or intellectual, is a bane. So long as woman is the child-bearer, she must be the weaker vessel, the stay-at-home-partner; the management of household and children falls to her lot; but she has some compensation—she feels the comfort of a protecter, and rejoices in her weakness. "I don't want equal rights; I like to be taken care of," was the sensible observation of a New York bride to Mr. Dixon.

Besides these inevitable evils, others, we confess, are heaped upon the sex by the selfishness and cruelty of man. It is a commonplace to say that amongst savages, woman is the slave, the chattel, the toy, the beast of burden, the hewer of wood and drawer of water; but how is it among ourselves? Women get the worst of everything, more especially in the "genteel" classes—*i. e.*, those who are too proud to do "menial" work, and cannot live on their means. That stupid pride, which prompts women to shun domestic service as "low," and to take or seek any other kind of work by preference, is the root of half their social evils; and the fact they are uneducated and unfitted for higher employment, is the source of the other half. Girls, in every class, get a worse education than boys do; they learn no arithmetic, no classics; all they get is a heap of accomplishments or "useful information," music which they play by rote but do not understand, a list of names and dates called history and geography, in fact, they are qualified neither for business, nor for teaching, nor yet for being companions and helpmates to a man who has his way to push in the world. We have reason to believe that there is abundant employment for women, if they were inclined and qualified to undertake it.

We affirm, then, that there is great need for raising women in position and education, and multiplying lucrative employment for them within the sphere of their own sex; but we think they make a mistake in undertaking duties which are better fulfilled by men. It is an aberration of the sexual instinct in any girl to aim at occupations which are incompatible with the duties of maternity, and an equal aberration to smother those maidenly instincts which should lead her not to intrude into the occupations which custom his associated with the male sex. There is no intrinsic sin in riding astride a horse, or in wearing boots and breeches, but there is harm in violating those decent rules by which the conduct of either sex is regulated. We say it in all kindness, that for a girl to present herself at a public medical examination is as great an aberration of sexual instinct, as it would be if a young man were to leave the dissecting room and apprentice himself to Madame Elise

or Mademoiselle Couturière. For, after all, women cannot get rid of their sex. What is their real glory, their very life-purpose? To be mothers. Theologians pretend that the Jewish women longed for children because each hoped to give birth to the Messiah! This may be; but all women long for children. "There is no true woman but feels at her bosom the yearning for a baby's lips. There is no true woman but longs in her secret soul for a man's breast to lay her head on, a man's eyes to give her the one look which he gives to nobody else in the world!" So speaks an American author, Bayard Taylor in a novel called "Hannah Thurston," which contains many a singular picture of modern American life and manners, and makes one feel that all America is not poisoned by communism and woman's rights. Read "Hannah Thurston," young ladies, and believe us that it is an aberration of the sexual instinct to choose occupations incompatible with maternity, and repulsive to the better class of men.

This article has extended to an extreme length, but we thought it better to finish the subject in one number. We hope we have shown how indissolubly the relations of the sexes are connected with religious and public polity; and we may add that any attempt to disturb either is fraught with danger to the whole social fabric. It is a significant fact that a very little license in religion and politics may bring man to a state in which they may not call anything not even the wife of their bosom, *their own.*—*London Medical Times and Gazette.*

II.—Extraction of Bullets in Gunshot Wounds.

Dr. Roser, the well-known Professor of Surgery at Marburg, and one of the ablest among the German critical writers, has commenced publishing a series of papers in the *Berlin Medical Wochenschrift*, entitled, "On some of the Errors in Military Surgery." The first of these relates to "Extraction of Bullets." The saying of Pirogoff, respecting Garibaldi's gunshot wound—that, had the presence of the ball been too early diagnosticated, he never would have preserved his limb—has its application, in Prof. Roser's opinion, to thousands of cases; for the necessity of hastening to seek for and extract balls is one of the most prevalent among the time-honoured prejudices of Military Surgery. All experience shows that this is wrong, and yet useless or mischievous manipulations are constantly resorted to. This has chiefly arisen from the precepts of the manuals, and the theory of gunshot wounds being deficient in clearness on this point, and in part from the erroneous idea that the injury produced by the ball is due rather to the irritation and pressure caused by its presence than to the

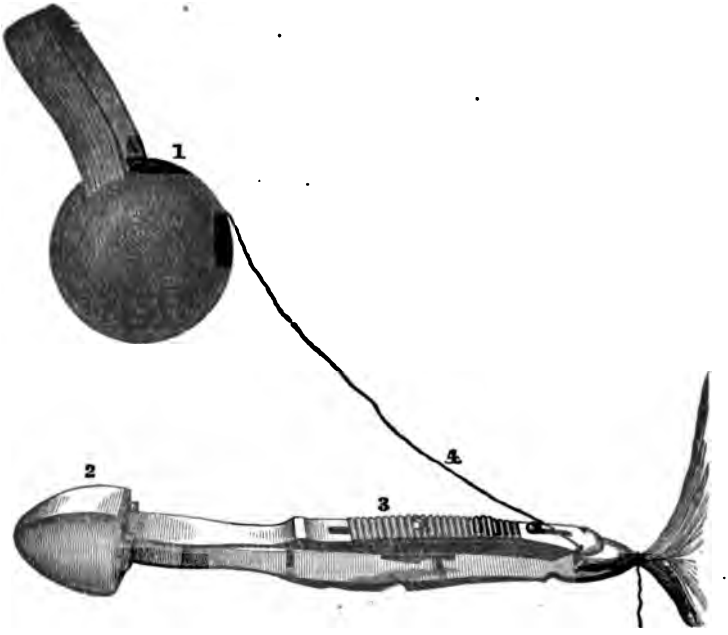
mischief done to organs and tissues by its penetration. But the maxim may be boldly laid down that, with few exceptions, the presence of the ball is but an unimportant part of the pathological process; that its extraction is scarcely ever a pressing necessity; that its too early cutting out and extraction is anything but a conservative procedure; and that, as a rule, its removal is only imperative when prolonged suppuration has to be prevented or terminated.

When a ball is lodged under the skin or only superficially in the muscular tissue, it should not be too hastily cut out. In many cases it has escaped notice for days or weeks, and in most cases it is much easier removed after suppuration has loosened it, than if it were sought for at first amongst the bleeding and infiltrated tissues. Exceptional cases do arise, as when portions of clothing are carried in with the ball, and give rise to acute and fetid suppuration. Even when the ball has penetrated the muscles deeply, we should abstain from the employment of instruments to search for it, such attempts irritating the wound, admitting the air, and increasing the effusion. They are, too, rarely successful, and, when they are so, necessitate much cutting or rupture of the fibre; and it may be well questioned whether the operation for the removal of the ball does not produce far more mischief than would have resulted from leaving it where it was. The rule in such cases should be to wait until the development of suppuration around the foreign body furnishes determinate indications. Even in the case of injury to bones, attempts at primary extraction of the ball should be exceptional, its mere presence little influencing the ultimate consequences of the accident. Finally, the time at the ambulances consumed in searching for and extracting balls, would be far better employed in attending to other cases liable to be neglected. The author quotes Pirogoff, who decidedly objects to such attempts being made in the ambulances, these operations being of too delicate a character and requiring too much time. He attributes the unfortunate issue of many cases to such premature and hasty interference.—*Med. Times and Gazette.*

III.—Surgeon's Reel and Artery Forceps. By Prof. John T. Hodgen, of the St. Louis Medical College.

We have been furnished the following description of Prof. Hodgen's admirable invention, "The Surgeon's Reel and Artery

Forceps," by Dr. W. B. Outten. As an ingenious and useful contrivance it is unequaled, and in long and difficult operations will be of great advantage as well as aid in the rapidity of operating.



No. 1 repesents the reel, which is an ordinary hollow rubber ball, the diameter of which is about one and one-fourth inch; there is a cut extending through about one-half of its extent, for the purpose of introducing within the cavity a ball or spool of Surgeon's silk; on each side of this cut two smaller cuts are made, so as to pass through and fasten an elastic band large enough to slip over the hand and fit on the wrist. After the silk is placed (being previously waxed) within the reel, the end is allowed to hang out an inch or so in order that it may be in readiness. In using it the reel is attached to the left wrist (by means of the elastic band), the end of the thread hanging out as stated above, the ligature may be drawn out the required length and applied with much celerity and but little trouble.

The Forceps are the ordinary duck billed; on the end of the handle is a large knob (No. 2,) weighing about an ounce, the object of which (knob) is that by its weight it stretches and draws

the artery from the soft parts, thus easily enabling a ligature to embrace the vessel. In the upper blade of the forceps there is an oblique notch (on both sides) three-fourths of an inch from the point, and one-fourth of an inch deep, passing obliquely upwards in the direction of the point, beveled so as to present a cutting edge forward. The thumb slide (No. 3,) is prolonged forward, having notches corresponding to that of the blade, with the exception that its cutting edge is presented backward in the direction of the handle; when the slide (3) is pushed forward so as to close the instrument these notches are brought opposite each other. In front of these notches, on the upper blade, there are little hooks directed obliquely backwards, which enable the ligature to be readily thrown into the notch; upon drawing back the slide (3) the forceps are opened, and at the same time the thread which is intended to be cut, being between the two sharp edges, is severed; thus there is combined forceps and scissors in the same instrument.

[*St. Louis Medical Reporter.*

IV.—The Proofs that Lithotrity is an Eminently Successful Operation. By Henry Thompson, F. R. C. S., &c.

The following is an analysis of the twenty-seven cases of stone in the bladder in which I operated by lithotrity during the year 1866.

The oldest patient of the series had passed seventy-six years of age; the youngest was thirty-nine years; four only were below fifty years of age; thirteen had a mean age of more than seventy years; six were above seventy-two years of age. The mean age of the entire twenty-seven cases is upwards of sixty-two years.

Taking the seventy consecutive cases I have operated upon by lithotrity in three years, it is very remarkable that the same mean age held good for each year, and consequently remains the same for the total number—that is to say, the mean age of the seventy individuals so operated upon is a little more than sixty-two years.

There were two deaths in the past year; there were two in the preceding two years, making four altogether; and I reckoned among these, as one death, a case by no means necessarily resulting from lithotrity. The worst construction, then, is at once accepted in order to meet any suspicion of an endeavour to make the case for lithotrity better than the facts actually warrant. I must add, in fairness to this question and also to myself, that many of these patients were in circumstances of health which rendered interference

very hazardous. The greatest care and very attentive watching were necessary to such patients. I have not selected cases; for, on the contrary, many of the worst and most difficult to deal with have been attracted by the success of the operation, especially during the last year, which has furnished me a class of patients much below the average in health and stamina.

In no case have I declined to employ lithotrity, unless an old and narrow stricture (in one case), or an exceedingly large and hard stone has rendered crushing impossible.

Cases of atony in the bladder (erroneously called paralysis), of greatly hypertrophied prostate, and of chronic renal and vesical disease, were of frequent occurrence among the series. I suppose it would not be possible to collect in three years seventy individuals of sixty-two years of age suffering from stone in the bladder without finding much chronic disease among them.

I have now, therefore, no hesitation in claiming to have established the following propositions.

1. That lithotrity is capable of freeing elderly patients from stone at a very small risk, if well-constructed instruments, with delicate manipulation, be employed, and if watchful care be exercised in the management of the patient.

2. That the success of lithotomy has never been in any way comparable with that which I have been able to report as the result of the crushing operation.

Relative to the mode of operating I have little to add. The lithotrites employed have almost invariably been those made by Messrs. Weiss, and fitted therefore with their most ingenious mode of changing sliding into screw action, and *vice versa;* and also with the cylindrical handle designed by myself, which permits of the most delicate movement, as well as of the utmost solidity of grasp.

I have never once used a preliminary injection. Mr. Clover's instrument for removing fragments was employed occasionally, only where it seemed to be wanted; by far the greater number of cases with me do not require it, but now and then it is very useful. I have never once used a syringe or any other apparatus for washing out to remove fragments.

Chloroform has been occasionally used—that is, in a very small minority of cases. There has been no instance of trouble with impacted fragments. Certainly on not more than two or three occasions have I found it necessary to use a pair of forceps to remove one.

I have particularly avoided the removal of any large fragment by the urethra. Nothing is easier, and I may add, as a rule, more

injurious. The lithotrite, at almost every sitting, contains between its blades a fragment which might be drawn through the canal. But it seems to me unwise to do this, when one turn of a screw pulverizes the fragment, and the débris comes away harmlessly enough by the natural powers of the patient. And no benefit can accrue from the removal of fragments whole, as compared with their removal in powder.

It is certainly a safe and useful plan to instruct the patient to pass no water during the first twenty-four hours after a sitting, except in a recumbent position on his back. The urine flows off, leaving the larger fragments behind in the bladder. Subsequently the urethra becomes less sore; the fragments are more water-worn, and therefore less sharp; and the passage and the fragments are far better fitted for contact with each other during the expelling process than at first. I am persuaded that this is a useful practice, and I have pursued it now for some time; invariably after the first two or three sittings with a large and hard stone.—*Lancet.*

CLINICAL RECORDS.

"Ex Principiis, nascitur probabilitas: ex factis, vero veritas."

Ablation of Fibroid Growths from Pharynx, Necessitating the Removal of half of the Facial Bones. By Julian J. Chisolm, M. D., Prof. of Surgery in Medical College State of South Carolina.

N. S., aged 21, a thin, delicate, sallow man, presented himself for treatment on Dec. 13th, 1866. His chief distress arose from the presence of a tumour which filled his mouth, and which interfered materially with his breathing. In giving his history, he stated that he had been diseased for eleven years, the affection commencing as a catarrh or nasal discharge which persisted. In time, the right nostril became stopped up, and it has remained so for several years, until the present day. Some years from the commencement of his sickness, a tumour protruding from the posterior nares and hanging in the pharynx, made its appearance from behind the soft pendulous palate. All the visible portion of this growth was removed by a local Surgeon, and such frightful hæmorrhage accompanied the operation, that when the tumour continued to grow and required further surgical treatment, he declined to operate a second time. The ablation of a portion of the tumour did

not arrest or retard its growth, as it soon made its appearance again in the mouth. Three years since a swelling appeared on the right cheek and has continued to grow.

The present appearance is presented by the patient. He is very much emaciated; is 5 ft. 10 inches in height; has always been thin and has never weighed over 105 pounds. He eats well; always has a good appetite; digests well, and suffers no pain. A smooth hemispherical tumour, the size of the first, occupies the surface of the right cheek. It is firm and elastic to the touch, gives no pain when handled, extends from the zygoma downwards, and from the ramus of the jaw forwards. It appears more or less firmly bound down to the deeper tissue, and is covered over with a healthy, gliding, adherent skin. It does not encroach upon the eye, the position of which organ is in every way normal. The teeth, in the right side of the upper jaw, are good, firm and even. The right side of the nose, in the vicinity of the lachrymal duct, is swollen and the duct apparently closed, as the lachrymal secretion flows over the face, instead of escaping by the puncta. In examining the right nostril, a fleshy mass is seen to fill it within half an inch of the external meatus, which, by lifting the nasal bone, has produced the swelling on the side of the nose and causes the epiphora, by closure of the nasal canal. The left side of the nostril, although narrowed by the displacement of the septum, remains open for respiration. The patient keeps his mouth open to assist in breathing, although the function is only partially performed, even by its help; as upon examination a large growth is found, which so fills the buccal cavity that the front teeth cannot be brought into contact within an inch. This buccal growth interferes materially with his mastication, deglutition, and articulation, as well as with respiration. He lives on fluid nourishment, and his pronunciation is, with difficulty, understood. The further examintion of this tumour, showed it to be located under the mucous membrane of the roof of the mouth, restricting its intimate adhesion to the right hard palate and the mesian line, although the fundus of the growth fills up the buccal cavity between the teeth. The examination of this firmly adherent mass, establishes its growth with that from the back of the throat, which continuous tumour nearly fills the pharyngeal cavity and fauces. Manipulation gives a little pain and establishes a decided disposition to hæmorrhage; blood escaping freely, both by the mouth and right nares. This buccal tumour has frequently bled and feels always sore, although it gives no actual pain. The lymphatic glands under the right side of jaw are enlarged.

The diagnosis of the case was somewhat obscure. The sallow, cachetic skin of the patient, the peculiar appearance of the face swelling, the clogging of the nares, and the location of the buccal swelling, under the lining membrane of the roof of the mouth, accompanied with enlargement of the submaxillary lymphatics, led one to suspect a malignant disease of the antrum, whilst the sound, firm and even row of teeth, no encroachment on the orbit, no adhesions of skin over the face tumour, its painless condition even when handled, its slow growth, and particularly the first appearance of the tumour in the nares and from behind the soft palate, years before it showed itself upon the cheek, suggested fibroid growths from the base of the skull behind the face bones.

As suffocation was momentarily threatening and life a burden, the patient desired relief. Chloroform was administered and only inhaled for a short period, as respiration was at best very laboured. When its action was suspended a solution of morphine, one-fourth gr., was injected, endermically, and the operation commenced a few minutes afterwards. The lines of section were designed to expose the surface of the superior maxillary bone, so that should the disease be found involving the antrum, this entire bone might be readily removed. The first incision extended through the median line of the lips and nose to its root, where it was connected by an incision at right angles, passing from the inner canthus of the eye. The division of the conjunctiva through the length of the inferior palpebral cul-de-sac, enabled me to dissect up a large flap and expose freely the surface of the facial tumour. This mass was now found to have no connection with the antrum, but to pass backwards by a stout massive root, filling up all the space between the ramus of the lower jaw and the external face of the upper maxilla.

The diagnosis was now clearly established, viz., fibroid growth from the soft tissues at the base of the skull, which by its expansion has involved the pharynx and nares and had also invaded the cheek. With a stout Liston forceps I removed the right superior maxilla, nasal bone, malar bone, and palate bone with pterygoid plates, which gave me a free entrance to the base of the tumour, which was now, by finger dissection, completely and without difficulty detached from the basilar process of the sphenoid bone. Its final removal was accompanied by very little hæmorrhage. Besides the prolongations of the tumour already named, offshoots had invaded the sphenoid and ethmoid cells.

The operation was very tedious, painful and bloody, and was followed by great nervous prostration, from which the patient did not recover.

After the arrest of the deep seated hæmorrhage by the free use of the per sulphate of iron and the closure of the wound, he partook liberally of stimulus and fluid nourishment. His pulse gained in strength and the skin was regaining its normal temperature, when he was attacked by vomiting and suddenly died four hours after the operation.

The items of greatest interest connected with this case, are gathered from the rarity of fibroid polypi in the roof of the phayrnx, especially in children. This growth commenced at the age of ten. Its slow growth in so young a person, eleven years to attain its size, its extended ramifications, filling the right ethmoidal, sphenoidal, and nasal cavities, filling the pharynx, fauces and mouth, and yet throwing out a heavy branch which, winding around the pterygoid plates, forced a passage through the pterygoid muscles, between the lateral surfaces of the upper and lower jaw, to establish a position for itself in the cheek, over the common site of malignant antrum tumours. The operation, though grave, was not much more serious than that for the removal of the superior maxillary, which operation experience shows is most frequently successful. This death is to be attributed rather to the low condition of the patient, and yet such was the interference to the important functions of respiration and deglutition, that he could not be improved, and was obliged to take the chances. Had he survived, there would have been very little visible deformity.

ORIGINAL CORRESPONDENCE.

"Sit mihi Fas scribere audita."

PARIS, June, 1867.

My intention in this letter, is to furnish the results of a series of experiments I have undertaken by the advice, and under the direction of Professor Monneret, in cases where Tartar Emetic was employed. The action of this agent has been considered chiefly in a two-fold point of view, viz., its effects upon the weight and temperature of the human subject. M. Monneret, in common with a large class of French Practitioners, administers this substance not only in two or three grain doses, but in cases of pneumonia or of hæmoptysis, attendant upon the early stages of

tuberculosis, he gives the emetic in from five to eight grain doses, according to the *Rasorian* method. It may not be out of place to say that M. Monneret's treatment of pneumonia consists exclusively in the exhibition of a draught containing from v. to viij. grains tartar emetic, to be taken by tablespoonfuls every hour. Blistering is also used, but the principal reliance is placed on the emetic, which is usually tolerated on the second or third day. Then immediately the stimulating plan is added to the above, and wine, broth, &c., are freely given. Since the beginning of 1865, I do not remember to have seen M. Monneret draw blood in a single case of pneumonia.

Tartar emetic is also exhibited in large doses and with success in his wards to cut short the abundant hæmoptysis which, occurring at the beginning of pulmonary consumption, weakens the frame and opens a road for the rapid progress of the affection. In the following lines it is intended to show the action of tartar emetic upon the weight and temperature, and hence the purpose of illustration will be better served by furnishing immediately the history of a series of cases in which this agent was administered in small and in larger quantities. From the figures obtained, the general results will be at once evident.

Obs. 1.—Bilious Fever—Constipation. } Patient entered hospital 22d June, 1866.

Dates.		*Weights.*		*Clinical Notes.*
1866.		Kilogram.	Grammes.	
June 23,		61	400	Tongue coated; fever; no stool since three days; vomited bile.
" 24,		60	900	June 23d.—℞—Tartar emetic, gr. iij.; Diet. I weigh the patient before the dose is given.
" 25,	D	60	500	
" 26,		60	000	
" 27,		59	500	June 24th.—Vomited several times yesterday, and went to stool twice; the weight has fallen off 500 grammes. A mild purgative is ordered for to-day, and the patient allowed a little broth.
" 28,		59	750	
" 29,	I	60	100	
" 30,		60	200	
July 1,	D	60	000	
" 2,		59	800	June 25th.—Two passages yesterday; the weight has fallen off 400 grammes since yesterday.—

D. i. e., decrease, } of weight.
I. i. e., increase, }

1 lb. avoirdupois is equivalent to 453.4148 grammes.

Allowed a little to eat. June 26th.—Had yesterday a disposition to diarrhœa; the weight is still declining; he is ordered the subnitrate of bismuth to check the diarrhœa. June 27th.—The diarrhœa continued yesterday, but has ceased this morning; is allowed to eat a little; the weight has fallen off considerable. June 28th.—The diarrhœa has not returned; the patient doing better. The improvement is found to have continued on the next two mornings, and the weight ascends on these three days. On the 1st July, the patient complains of having thrown up bile, and the weight is seen to have declined. A purgative is given, and a fresh decline in the weight is noted on the 2d. That day the patient is discharged at his own request.

Remarks.—Although the oscillations presented by the series of weights in this case are interesting, still I desire merely to call attention to the loss which attended the exhibition of the three grains of tartar emetic, whose effect was to bring the weight down 500 grammes in twenty-four hours.

Obs. 2.—Lead Poisoning. { Third attack of colics—Constipation; paralysis of the extensor muscles.

The patient, a house-painter, enters hospital on July 3d.

Dates.	*Weights.*		*Clinical Notes.*
1866.	Kilogram.	Grammes.	July 4th.—Suffers severely from colics and constipation.—℞—Tartar emetic, gr. iij.—Diet. Is weighed before taking the emetic. July 5th.—Vomited yesterday several times, and had two copious motions from the bowels; the weight has fallen 380 grammes. Tongue still coated; colics less severe. ℞—Epsom salts. To be allowed nutritious broth this evening. July 6th.—Had yesterday three passages; the weight has gone down 370 grammes—is allowed a little to eat. July 7th.—Had two stools yesterday; the weight is still falling; is allowed meat diet to-day. July 8th.—One stool yesterday, and another this morning before the visit; eats with appetite, but is weak; the weight is still falling off. July 9th.—Had one stool yesterday; the weight still going down. July 10th.—The weight has ascended since yesterday.—
July 4,	64	900	
" 5,	64	520	
" 6,	64	150	
" 7,	63	800	
" 8,	63	540	
" 9,	63	320	
" 10,	63	440	
" 11,	63	600	

From the 4th till the 9th, inclusive, the patient lost 1,580 grammes under the influence of the emetic, the purgative, and the diet to which he was at first submitted. July 11th. Patient doing well; the weight continues to ascend; asks for his discharge.

Remarks.—As in the preceding observation, attention is called chiefly to the loss of weight (380 grammes) under the influence of the tarter emetic alone. The patients whose history is related in these observations, were both stout, and of good constitution, and yet, under exactly similar doses of emetic, one lost 500 grammes in twenty-four hours, whilst the other fell off only 380 grammes in the same space of time. Diet being strictly enforced in both instances, the observations can be compared with respect to the proportion of decline noticed to have been presented by the weight.

Obs. 3.—Lead Poisoning. } Third attack of colics; patient, by profession a house-painter; enters hospital on July 10th, 1866.

Dates.		*Weights.*		*Clinical Notes.*
1866.		Kilogram.	Grammes.	
July 11,	D	63	100	July 11th.—Suffering from colics, and has been constipated for six days. The patient is a man of not remarkable strong constitution, and has suffered privation. ℞—Emetic, gr. iij.; diet; is weighed before taking the emetic. July 12th.—Threw up a great deal yesterday, and had two copious stools; weight fallen off 450 grammes; feels relieved, but his tongue being still coated he is ordered a purgative enema this morning; this evening, nutritious broth is to be given. July 13th.—The enema was followed by three motions from the bowels; the weight has fallen 350 grammes; patient doing well; colics disappeared; is feeble; wine and meat diet are ordered. July 14th.—Doing well; the weight has increased. July 15th.—Improving; eats heartily; one natural passage yesterday. July 16th and 17th.—Improvement continues; patient asks to be discharged on the 17th.
" 12,		62	650	
" 13,		62	300	
" 14,	I	62	410	
" 15,		62	650	
" 16,		62	900	
" 17,		63	170	

Remarks.—It will be seen that the loss of weight due to the effects of the tartar emetic *alone*, is nearly as great as that remarked

in Obs. 1, and is larger than that observed in Obs. 2, in both of which instances, the patients were healthier and more robust than in the present case, thus appearing to indicate that a comparatively healthy and strong man has more to lose than a fellow sufferer upon whose frame, enfeebled by long continued disease, the tartar emetic would seem to take less hold.

It is thought that these three observations will be sufficient to illustrate the depressive action small quantities of tartar emetic have upon the weight, and therefore the influence of larger doses, exhibited according to the Italian plan, will be immediately considered in their effects upon weight, temperature, etc.

The following observations have all been made with the thermometer placed in the axilla, and a centigrade thermometer has been employed. Thirty-seven degrees of this scale indicate the healthy range of temperature. To reduce centigrade to Fahrenheit degrees, the former must be multiplied by nine, then divided by five, and to the product, thirty-two must be added, i. e., 37° centigrade are equivalent to 89°.6 Fahrenheit.

Obs. 4.—Tuberculosis. } Third stage. The patient, æt. 18, a man of feeble and debilitated frame, entered hospital on 13th February, 1867.

Dates.	*Weights.*		*Temperature.*		*Pulse.*		*Respiration.*	
1867.	Kilog.	Gram.	M.	E.	M.	E.	M.	E.
Feb. 28,	55	800	39°.9	38°.7	100	120	32	32
Mar. 1,	55	470	38°.7	39°.4	112	112	40	32
" 2,	54	570	39°.4	39°.6	104	116	28	44
" 3,	54	420	40°.	39°,9	116	108	32	48
" 4,	54	470	39°.1	38°.6	108	116	48	32
" 5,	54	900	40°.1	39°.3	120	104	40	36
" 6,	55	700	38°.9	37°.8	112	128	44	68
" 7,	....	....	39°.	38°.9	160	156	60	60
" 8,	....	....	38°.4	38°.3	120	120	52	32
" 9,	....	....	39°.	39°.2	108	144	44	48
" 10,	....	....	39°.2	38°;8	124	128	60	44
" 11,	52	910	38°.2	37°.	140	136	56	52

In this and following cases, M. indicates morning, E. indicates evening } observation.

Auscultation and percussion revealed the presence of a large cavity at the apex of right lung, with softening at the left summit.

After alternatives of better and worse, which it is not my purpose to relate here, the 28th February was reached. On that day signs of pneumonia were noted in the left lung, and M. Monneret ordered ℞.—Tatar emetic, gr. v., in a draught, to be administered by table spoonfuls each hour. The temperature, pulse, and breathing were noted and the weight taken before beginning the treatment. The draught was given regularly through the day, and caused the patient to vomit twice copiously. At the evening visit the emetic is found to have brought the temperature down 1°.2, but the pulse is stronger than this morning, and the frequency of the respiration has undergone no change. March 1st.—Weight 55.470; loss since yesterday, 330 grammes; this is explained by the vomiting and diet. The temperature too, this morning, is lower than yesterday, and agrees in this with the pulse, which has come down since last night. The respiration has increased on the contrary.—March. 2d.—The tartar emetic brought on yesterday three copious stools and vomiting; the weight has fallen off 900 grammes. The pectoral symptoms are no better. An attempt is made at stimulating the patient with wine and broth. The temperature has not changed much since yesterday morning, but agrees with the increase in the frequency of the pulse and breathing to-day.—March 3d.—The temperature this morning is very high. The pulse and respiration are, the former at the same level, and the latter less frequent than last night. The tartar emetic caused the patient to vomit once yesterday, and procured one stool; the weight still going down. Patient very feeble; stimulants are given as freely as possible. March 4th and 5th.—It will be noticed that on both these days the morning observation of temperature shows a higher range than the evening; thus reversing the rule generally observed even in a state of health. On the 4th the pulse was *more frequent* in the evening, although the temperature was *lower* than in the morning. On the 5th the pulse agreed with the thermometrical observation. On both days, the number of respirations was, like the temperature, higher in the morning. The tartar emetic was perfectly tolerated on the 4th and 5th, and immediately the weight began to ascend, expressing, as it were, the efforts of the organism to repair its losses. At the evening meal, on the

5th, the patient ate two eggs. March 6th.—The morning temperature again higher than that of the evening; the contrary obtains for the pulse and number of respirations. The weight continues to ascend; patient apparently better. This state is merely fictitious, however, as from the advanced stage of pulmonary disease and the general debility, a very unfavourable prognosis is drawn. Considerable hoarseness; a small blister to be applied over the larynx.—March 7th.—Patient so weak that he cannot be weighed. The temperature and pulse hardly vary; respiration hurried—60; pulse thready; patient sinking fast. This morning an effusion into the left pleura is discovered. The quantity of liquid is considerable, and it is probable that the collection has been forming insidiously for some days. It will be noticed that from to-day on to the 11th, the morning temperature (save on the 9th) is always higher than in the evening. The pulse and respiration are more regular than usual in observing the same course followed by the thermometer. On the 11th, in the morning, the patient was weighed on being removed to a freshly made bed. Since the 6th he has lost 2,790 grammes. This is accounted for by the very high fever, and by the fact that for some days the patient had refused to eat. The tartar emetic was discontinued on the evening of the 8th. It had ceased producing stools and vomiting. Death occurred at 8 P. M., on the 11th. The temperature was taken that evening at 6 P. M., while the low figure of 37° was obtained, the pulse was 136, thready, and the breathing 52. Refrigeration had begun.

Remarks.—Attention is called to the following points:

1. The action of the tartar emetic upon the weight. In this case, the weight fell off only 330 grammes in the twenty-four hours immediately following the administration of the gr. v. tartar emetic. The debilitated condition of the patient and the size of the dose might, it seems, have appeared a sufficient warrant to predict a still greater loss, and, yet, the decline noticed in the weight was less than that recorded in Obs. 1, 2, 3, where only gr. iij. were administered, and in which the patients were stronger men and to all appearances better able to resist the destructive tendency of the remedy.

2. The evening of the day upon which it was administered the temperature was 1°.2 *lower* than in the morning before its exhibition, whilst the pulse had, on the contrary, become more frequent.

3. Frequently there seemed to be no connection whatever between the temperature, the state of the pulse and the number of respirations.

4. On several occasions the temperature was higher at the morning than at the evening observations, thus reversing the rule generally observed to be followed by the thermometer.

Obs. 5.—Idiopathic Pneumonia. } Pneumonia at apex of right lung. Patient enters hospital on January 11, 1867.

Dates.	*Weights.*		*Temperature.*		*Pulse.*	
1867.	Kilog.	Gram.	M.	E.	M.	E.
Jan. 12,	62	100	38°.5	37°.	96	84
" 13,	59	990	36°.3	38°.	80	92
" 14,	60	850	39°.	88°.5	84	80
" 15,	59	720	36°.5	36°.7	80	72
" 16,	60	240	37°.	37°.8	64	80
" 17,	59	500	37°.	37°.4	56	68
" 18,	59	550	37°.	38°.6	60	68
" 19,	60	400	37°.	38°.4	64	68
" 20,	61	500	37°.2	36.°8	56	60
" 21,	62	090	36°.4	37°.	60	64
" 22,	63	250	37°.	37°.4	68	72
" 23,	63	950	37°.3	37°.6	64	72

On the 12th, auscultation and percussion revealed the existence of limited pneumonia at the summit of right lung. Patient is a man of vigorous constitution. Diet; ℞.—Tartar emetic, gr. v., in a draught to be administered by tablespoonfuls each hour. He is weighed, and the temperature and pulse noted before commencing the treatment. At the evening observation, the temperature and pulse, the former especially, are found to have diminished.

The draught caused vomiting several times, and four copious stools. January 13th.—The weight has fallen off remarkably—2110 grammes. The morning temperature is very low. Patient doing well. The evening observation of temperature is satisfactory. The draught was perfectly tolerated to-day, and the patient was given wine and broth. January 14th.—Has been restless since 4

A. M. When the thermometer was applied at 7 A. M., the temperature was found high. The pulse had not become correspondingly frequent. Yesterday had been a good day; the patient had eaten with pleasure, the weight had ascended 860 grammes, and this morning's exacerbation cannot be accounted for locally. In the evening, the patient was again quiet. The draught has caused nausea and four copious motions since 2 P. M. January 15th.—Vomited once during the night; the weight has fallen off 1130 grammes since yesterday morning. The temperature is at a low level to-day at both observations. The number of pulsations in the evening does not agree with the result furnished by the thermometer. Draught well tolerated to-day; has eaten heartily this evening. Jan. 16th.—Temperature and pulse within the healthy range; weight has ascended since yesterday. Pectoral symptoms indicate resolution of the inflammation. This morning complained of a little nausea; tongue coated; a purgative is ordered, and caused three stools. January 17th.—Temperature and pulse at the healthy standard. The weight has fallen off. January 18th.—Patient doing well; had one liquid stool yesterday; the weight is ascending slightly. The evening temperature higher than usual. January 19th.—Patient improving; the local symptoms have nearly entirely disappeared; eats heartily; no stool; weight ascending from to-day on to the 23d, when he was discharged; nothing particular to notice, save the series of weights which continued to ascend, and the number of pulsations which did not always follow exactly the thermometrical oscillations.

Remarks.—Attention is called to the following points:

1. The emetic brought the temperature and pulse down immediately.

2. The weight fell off remarkably, 2110 grammes in twenty-four hours, and this, although the man was of strong constitution; in the preceding observation, although the patient was greatly debilitated, the loss was only 330 grammes. From the contrast thus afforded, it would seem as though the *strong* man were taxed more heavily than a feeble person, whose means are well nigh exhausted.

The two following short tables are furnished in addition to what precedes for the sake only of multiplying illustrations; on this account, the effects of the tartar emetic have been considered only during the first forty-eight hours following exhibition. The desire of not giving undue length to this letter, causes the suppression of details.

Obs. 6.—Symptomatic Pneumonia; (limited.) } Summit of right lung, May 17th, 1867. ℞.—Tartar emetic gr. vj., in customary draught.

Dates.	*Weights.*		*Temperature.*		*Pulse.*		*Respiration.*	
1867.	Kilog.	Gram.	M.	E.	M.	E.	M.	E.
May 17,	40	850	37°	36°.8	76	100	30	28
" 18,	40	520	37°.4	37°.8	80	92	22	28

Clinical Notes.—The patient appears to be a man of ordinary strength. His temperature, pulse, &c., are observed at 7½ A. M., on the morning of May 17th. Half an hour later he is weighed. The use of the tartar emetic is then begun. During the day had two stools and vomited twice. In the evening, the temperature is found to be *only two-tenths* of a degree lower than in the morning. The number of respirations has also come down, but the pulse has increased in frequency. May 18th.—The temperature remains within the healthy range; the pulse in the evening is rather high. This morning the pectoral symptoms, which had never been very alarming, have improved. The weight has fallen off, but not in a very large proportion—330 grammes. This observation confirms those which precede, and hence, it is thought, needs no remarks.

Obs. 7.—Symptomatic Pneumonia. } Apex of left lung. ℞.—Tartar emetic gr. vj. Patient, a child, æt. 17, is of weak frame and weighs only 42.600.

Dates.	*Weights.*		*Temperature.*	
1867.	Kilogram.	Grammes.	M.	E.
Ap'l. 4,	42	600	38°.6	38°.2
" 5,	41	700	38°.2	39°.4

The draught was administered on the 4th, after the temperature, &c., had been noted, and the weight taken. The tartar emetic caused six stools and copious vomiting. In the evening, the tem-

perature had fallen four-tenths of a degree. The next morning the patient was found to have lost 900 *grammes*.

In the foregoing observations, it has been noticed that the effect of tartar emetic appears to consist partially in lowering the temperature. Such is not always the case however, as in M. Monneret's service lately, in *four instances*, an *increase* of temperature has been seen to follow the administration of the tartar emetic. It is probable that these are merely exceptions, still the fact is given for what it may be worth. From the above notes, it is thought that the action of tartar emetic may be resumed under the following heads:

1. Its depressive influence upon the organism is indicated by the decline furnished by the observation of a series of weights. Here, however, arises the question as to the reason why this substance, whether in small or large doses, acts with such apparent capriciousness, sometimes lessening in a comparatively small proportion the weight of a *debilitated* patient, while in other cases, a seemingly *strong* man falls off in a surprising manner. Is it because certain dynamic conditions of life are stronger in the first than in the second instance, thus occasionally enabling a debilitated patient to resist better than the apparently *strong* man, in whose case the same dynamic conditions are not so powerful? Or is it not perhaps because the feeble patient has already been taxed so heavily by long suffering, that his organism can lose no more, whilst on the contrary, a strong man affords a field from which disease can reap an abundant harvest? It would be premature to venture upon explanations as yet, and before conclusions can be formed it will be proper to wait until numerous observations will have been collected.

2. The temperature usually becomes less elevated after the administration of the tartar emetic, and this decrease of temperature is noticed a few hours after the dose has been exhibited. Sometimes the decline is quite noteworthy, while again it consists only in a few tenths of a degree. Instances of both species of variations have been furnished. As for the temperature, there seems to be no rule to govern the descent of the mercurial column in the proportion it bears to apparent individual strength of consti-

tution. It is also at present impossible to explain why in some cases the temperature comes down considerably, while in others the decline is almost insignificant.

3. In some observations, the pulse and thermometer agree, the former ascending or descending according to the course followed by the latter. More frequently, however, these two elements of diagnosis and prognosis, appear to be perfectly independent. When this happens, the main reliance is placed upon the thermometer, whose indications are generally considered as being of greater value than those furnished by the pulse. The breathing also does not inspire more confidence than the circulation, as the number of respirations often agrees no better with thermometrical observation than the number of pulsations.

Dr. Peter has recently presented a memoir to the Academy of Medicine upon the relationship existing between the heat of the body and the circulation. His conclusions are the same as those arrived at in M. Monneret's wards before I was made acquainted by the Medical Press with his memoir. Dr. Peter says that there is no constant connection between the variations of the temperature and those of the circulation, i. e., an increase or decrease in the frequency of the pulse does not necessarily bring about a corresponding variation of the thermometer and vice versa. He also makes the same remark with respect to the number of respirations.

It is hoped that the above notes may not prove devoid of interest, especially as the illustrations have been selected with the view of demonstrating a particular series of facts, and on this account as well as for the sake of conciseness, details as to diagnosis, etc., have been omitted in this paper, in which the main object has been to show different effects which have been noticed to attend the exhibition of tartar emetic. The foregoing cases have been selected to represent, each, a series of observations, which for want of space cannot be published at present. T. L.

PHILADELPHIA, PA., July, 1867.

Medical matters are almost at a stand-still in Philadelphia. The Summer Schools have closed their labours. The Colleges will not again reöpen, until the regular Winter Session begins. Students

have much to regret at this. I was present, about a fortnight since, at one of the surgical clinics of the Jefferson School, and saw Dr. Gross perform, what he calls his *heroic* operation, for *atrocious neuralgia*. It was a radical cure, and a success, beyond a doubt. The patient had been horribly tortured with this agonizing complaint for about ten years. He had not known a quiet day, or an unbroken sleep for that length of time. His face was distorted, too, by the constant pain, which almost all the time was perfectly excruciating in its character. Quinia, morphia, iron, aconite, had all been tried, and that in large doses. The relief resulting from this treatment was slight and transient. After etherization—rather, chloroformization—Dr. Gross made an incision over the lower maxillary, commencing just above the angle, and extended it about three and a half inches along the body of the bone. Pushing aside the soft parts and ligating the arteries, which he premised were necessary to be divided, he scraped away the periosteum and trephined the bone in four places. Then dislodging the trephined parts, he hooked up the inferior dental nerve, and cut away about two inches of its length. A week after the operation the man appeared again at the clinic. The wound, despite the necessary rudeness of the operation, had united almost its entire length by first intention, and the man's face was radiant with happiness. The pain, with the exception of a few fugitive twinges, had entirely disappeared. These, the Doctor asserted, would shortly depart also, and ascribed their presence simply to force of habit.

At a clinic prior to this, Dr. Gross operated on a young boy of seventeen for stone; he preferred the lateral mode of Cheselden.—Two peculiarities that characterize this operation of Dr. Gross, are, the small opening, external and internal, that he makes; and, secondly, he introduces no tube into the wound after the operation. He condemns this practice; says the tube simply acts as a foreign body; tends to excite spasms of the bladder, and in a word, does much harm, for the sake of a very little and very ambiguous good. When the operation is correctly performed, he says there exists no danger of infiltration. I followed up the history of this case: the young man left for home, having recovered without a single untoward symptom.

As yet we have had no cholera. However, some of the wise-acres pretend that they have had several cases of genuine Asiatic cholera. I was told some ten days ago, that five or six cases had certainly occurred in the City. It is equally certain, however, that no cases have been reported to the health officer up to date. There were twelve deaths last week from cholera infantum, and one from cholera morbus. However, there is no such thing as a *cholera scare* this Summer here, although it takes but little to produce one.

At the date of my last letter, I was under the impression that our sanitary matters were in better condition this than last Summer. I have, to my chagrin, learned indubitably that I was mistaken.—The City Councils of Philadelphia, have refused, squarely, to make an appropriation necessary to defray the expenses of cleansing the City; and thus far, the down-pouring showers have been our only scavengers.

Should the cholera invade the City, they will at once vote themselves an appropriation to visit the Green Mountains, or the White, or the Rocky, just as it should suit the majority. On every fitting occasion they have stultified themselves, or disgraced this fair City, which they so cruelly *mis*represent, and they will continue to do so. Such is the *vox populi*. M. Daumé's theory of the propagation of cholera, being due to a specific cholera animalcule, does not meet with favour among our *savans*, as far as my information extends.—Have your medical men discussed the point?

We are again having strange weather. This cool, wet day, with the thermometer at 67°, far more befits February or March, than balmy June—"so-called." Yet we have had some excessively warm weather, the thermometer having recorded 90° in the shade. These changes, almost always sudden in their character, must be provocative of sickness.

A new Medical Association has been inaugurated in Philadelphia, composed chiefly of the members of the Profession residing in the Northern section of the City; although its ranks are open to all regular Physicians, from any portion of the City. The organization is styled the "Union Medical Association," and has for its object, a protective basis of action, and an aim toward self-improvement and the interdissemination of Medical knowledge. There are

already two prominent medical associations in Philadelphia—the Philadelphia County Medical Society and the Philadelphia College of Physicians. I am acquainted with several of the gentlemen belonging to these Societies, and must admit, I have never met more perfect gentlemen, and men more the ornaments of their Profession. The Union Medical Association is scrupulous only on one point—the regular graduation of their members.

I was in hopes that I might send you, in this, an engraving illustrating Dr. Boisnot's patella fracture splint, referred to in my last letter; but I hope to be able to forward you, not long hence, the stereotype of the engraving. I likewise will be compelled to defer until another letter, a notice, as I had promised, of Dr. Cohen's essays on the laryngoscope and its revelations.

There has, at last, been established in Philadelphia, or to be established, an asylum for inebriates. While we have reason to deplore the necessity for such an Institution, yet it is, indeed, a source of gratulation, that we have it under the able superintendence of a fellow-citizen of such worth, as Dr. Joseph Parrish.—I have not learned the probable location of the asylum.

Flint's Physiology of Man, and a large, fine work on Leprosy, tracing even the most minute biblical history of this disease, are among the latest publications; but I have not had time to examine either. At present, there is quite an influx of works on criminal abortion, and prostitution in high life. Dr. Storer, of Massachusetts, has a work on this fruitful theme in press, and has given it, with his customary eccentricity in such a regard, the unmeaning and flashy title of "Is it I?" In my opinion, and in that of many others, the Doctor is at fault in selecting titles for his works. This book is said to be a companion to his "What is It?" The names of these books gives not the slightest idea of their contents; and while perhaps, from this very sensationality (?) of title, they may tempt the curiosity of the general public; yet, for the same reason, they will be passed over by the Physician, except, indeed, when he chances to glance at the author's name; and despite this singularity, Dr. Storer has a high name for authority, and his works are widely and deservedly popular.

In another work on criminal abortion, by Dr. Le Prohon, (from

New England likewise, I believe,) the extreme opinion is pronounced, that under no circumstances whatever, should abortion or premature delivery be resorted to—that under any condition it is criminal, and that an attempt through this means should never be made to save the mother's life, *because God has so decreed it.* The Doctor has never studied the logic of Surgery—especially in gun-shot wounds—for this is nonsense in its very verity. But the Doctor, not content with this *pronunciamento,* goes on to state, what will strike with amazement four-fifths of his readers (should he have any,) viz., that the Romish faith is the only religion that prevents the mother, *imprimis,* from doing wrong! In other words, according to our author, in cases of abortion, the Catholic church is the best—*prophylactic!* Dr. Le Prohon's work should then be unhesitatingly condemned. It was, in its foolish prejudices, in its violent extremes, and its teachings are not healthful, but tend to induce mental sickness. It is written in good style, but, in my judgment, is faulty as regards its fundamental teachings. It cannot be denied, however, that criminal abortion, is now carried on with scarcely any concealment, and certain men, who are *styled Doctors* in *this* community, are pointed out as *notorious abortionists.* I know a Physician in this City, who boasted to me, of the power of a certain pill, (*put up by first-class houses,*) in inducing premature delivery. Money is an all-powerful lever, and a $20 note, will generally bring forth the necessary prescription for the *pills.* We must have a higher standard, *mentally* and *morally,* in our own Medical Schools. W. M. T.

Mobile, Ala., July, 1867.

I have yet to see the first case of excessive nausea and vomiting that would not yield to the influence of electro-magnetism, I make the application by placing one pole on the nape of the neck and take the other pole in one hand, and then place my hand over the stomach and continue to move the hand about over the entire region of the stomach for ten or fifteen minutes, at which time the patient may be allowed a tumblerful of water without the fear of

vomiting, indeed, if we continue the current whilst the drinking is going on, it will be impossible to vomit it up. The most nauseating doses may be given and retained by the stomach, if the application of electricity is kept up; thus doing away with the endermic practice and the more unpleasant way of introducing medicines by injections when the patient can swallow.

A. D., M. D.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

"Judex Damnatur cum nocens Absolvitur."

INFANTILE PARALYSIS AND ITS ATTENDANT DEFORMITIES. By CHARLES FAYETTE TAYLOR, M. D., Resident Surgeon, New York Orthopœdic Dispensary, &c., &c. Philadelphia. J. B. Lippincott & Co. 1867. pp. 119.

A very sensible book. The writer endeavours to show "that the disease is essentially peripheric, and that the great nervous centres are only indirectly and secondarily implicated." He very well remarks, "the difficulty of treatment consists much less, in relaxing the shortened muscles, than in giving tone and strength to their antagonists—the lengthened and weakened ones. * * * In reference to this, the following (propositions) are believed to be true.

"1st. To retain a healthy muscle in an expanded state, for a certain length of time, is to diminish or destroy its irritability and contractile force.

"2d. To extend a muscle while in the act of contracting, that is, to overcome it, is to *at once* destroy its irritability and force."

In accordance with these views, the writer recommends the use of appliances which will protect the weakened muscles from too great tension, and will facilitate such *moderate* exercise as will restore their function.

These views are well illustrated in the treatment recommended for paralysis of the deltoid muscle, viz: "so long as the weight of the arm exceeds, by the smallest fraction the strength of the muscle, it will continue to be overpowered, and utterly incapable of causing the slightest movement of the arm, and yet, there may be within it a latent

strength, only needing opportunity to be shown and developed, till it might become adequate to effect ordinary movements; suppose the arm weigh ten pounds and the deltoid could lift but five, how is this latent force to be made available? Simply by reducing the resistance to the muscle—that is, reducing the weight of the arm to three or four pounds, or to any amount less than the capacity of the muscle, when we should immediately witness a movement of the arm by action of the muscle."

This is accomplished by suitable apparatus, figured and described in the book. B.

WATSON ABRIDGED. A Synopsis of the Lectures on the Principles and Practice of Physic, Delivered at King's College, London. By THOMAS WATSON, M. D., &c., &c. Abridged from the last English Edition, with a Concise but Complete Account * * * * * of all the Medicines mentioned in these Lectures, and with other Valuable Additions. By J. J. MEYLOR, A. M., M. D. Philadelphia. Published by the Author. 1867. pp. 277.

We should as soon have expected to see an abridged edition of Homer's Iliad, with valuable additions as to have seen such an edition of Watson's lectures. The beautiful, chaste, classic style of Watson expunged, and somebody-else's commonplace style substituted! What a desecration! We have, however, been enlightened on one point, viz., that Watson is so *verbose* that "all the substance of the original" may be condensed into two hundred and forty-three pages.

The tyro, however, who may wish to *practice according to Watson*, may carry this manual in his *pocket*. Instead of storing his head with the great fundamental truths of medicine, he may look over its pages and see what Watson says, and then turn to the appendix and find a materia medica adapted to Watson. If his pecuniary condition and industrial habits be low, he need purchase no other Work on practice, and make himself a very safe Practitioner.

We call the tyro's attention, however, to the following remarks of the great author himself: "Our common Profession is making such large advances every year, that a Work on the practice of physic must very soon become stale and defective." B.

INHALATIONS IN THE TREATMENT OF DISEASES OF THE RESPIRATORY PASSAGES, PARTICULARLY AS EFFECTED BY THE USE OF ATOMIZED FLUIDS. By J. M. DA COSTA, M. D., Physician to the Pennsylvania Hospital, &c., &c. Philadelphia. J. B. Lippincott & Co. 1867. pp. 86.

The author gives very complete descriptions of the various kinds of

inhalers, a list of remedies and their doses, and presents very fairly the benefits to be derived from this mode of medication. He is evidently not an enthusiast in regard to the value of inhalations in the treatment of diseases of the respiratory passages, and we confess, after a careful perusal of the Work, that we shall not put our patients to the expense and trouble of experimenting upon themselves, until we receive information of more satisfactory results of the trials upon others. B.

CATALOGUE OF THE UNIVERSITY OF VIRGINIA. Session 1866-67.

The Catalogue of the University of Virginia has been received. It is highly gratifying to find that this venerable Institution is rapidly regaining that well deserved reputation and prosperity which the incidents of the last few years have obscured and interrupted. The attendance, during the last Session, has, in numbers, been above the average of that in the years which have elapsed since the organization of the University. The greatest number in attendance, in any year, has been 645. In 1860 there were 604 Students, and in 1866 490. This rapid tendency to regain the condition existing before the war, is remarkable and pleasing. At no School of Medicine is a Student graduated, with a more thorough knowledge of the theory of his Profession, and were an attendance of four or five months, on necessary clinical instruction, exacted at the University, as a preliminary to graduation, this, with an increase of its Faculty, would make this School even more prosperous than the best Medical College in America.

It is assumed, that most of its graduates go to some City, where clinical advantages are to be obtained, but it is not to be denied, that many graduates enter at once upon the responsibilities of a Practitioner's life, without any attention having been bestowed upon the indispensable requisite of clinical demonstrations.

It is to be hoped, for the increased prosperity and reputation of this School, that, as was urged in 1866, these advantages will soon be added to those already existing.

The vacant Chair of Medical Jurisprudence, Obstetrics and Practice of Medicine, will be filled by an election in September, 1867.

THE CATALOGUE OF THE MEDICAL COLLEGE OF VIRGINIA, for the Session of 1866–67, with the announcement for the Session of 1867-68, has been received.

There are many subjects in this paper which are brought prominently to the attention of the medical Public.

The Faculty declare their readiness to extend their annual Session (in conformity with the recommendation of the recent Convention of Medical Teachers) to a period of six calendar months, "as soon as it is apparent, that the prominent Schools of the Country are prepared to unite in this desirable reform."

The clinical advantages have been much improved, and the Faculty stand pledged to make a use of this material, as well as the material for dissection, an invariable duty on the part of each member of the class.

Excellent features in the policy of this Institution, are, that to be received, as a candidate for graduation, the Student must have paid ample attention to dissection; that evidence must be afforded of his having attended the clinical lectures of the Session; that the thesis required, and upon the subject of which he is to be examined, is written by himself, and is free from all errors in orthography and syntax.—Such errors in a thesis, will exclude the writer from the list of candidates for graduation. It will be thus seen, that the stereotyped objections in regard to the requirement of the thesis (so unpopular wit Students,) have been squarely met and subverted. No one can deny that a thesis, thus written, and thus made the subjest of examination becomes a prime, if not the chief, test of a Student's proficiency.

The other requirements are as usual. No change has been made in the fees of this College, as under the present circumstances of pecuniary prostration, it is proper that they should, at least, not be higher than they were during the period of prosperity, antecedent to the late war.

Many additions have been made to the museum, apparatus, models, instruments, etc., essential to a Medical College.

The new Chair of Pathology and Pathological Anatomy will not, it is stated, increase the number of daily lectures.

There is, in connection with this College, a Summer School, whose Faculty are competent to efficiently discharge the duties devolving upon them. A course of lectures from this School will be regarded, by the College, as an equivalent for twelve months of study.

Medical College of the State of South Carolina.—In announcing the coming Session of the Medical College of the State of South Carolina, the attention of the Alumni, and all interested in the

continued success of the School, is invited to important changes which have occurred since the issue of the last Annual Circular.

The death of Professor Henry R. Frost, created a vacancy in the Faculty, which was soon after filled by the appointment of Dr. R. A. Kinloch, who for many years previous, had been engaged as a Clinical teacher at the Roper Hospital. Since the close of the last session, the College has sustained the loss of Professors James Moultrie and T. G. Prioleau, who had occupied the respective chairs of Physiology and Obstetrics, from the foundation of the School. Admonished by age and other considerations, these gentleman have thought proper to retire from the laborious duties of teaching.

The Faculty have deemed it advisible to rearrange the Chairs in such a way, as to amalgamate the two Professorships of Anatomy and Physiology into one Chair of General Anatomy and Physiology. They have also reëstablished the Chair of Pathology and Hygiene, the duties of which have been for some years divided between the Professors of the Institutes of Medicine and Surgery. Professor F. T. Miles was elected to the newly made Chair of General Anatomy and Physiology. The Lectures upon Special Anatomy have been assigned to Dr. F. LeJ. Parker, the supplementary Professor of Anatomy. Dr. J. P. Chazal has been called to fill the Chair of General Pathology, Pathological Anatomy and Hygiene. Dr. F. M. Robertson was elected to fill the Chair of Obstetrics, and Diseases of Women and Children.

During the last Session, there were 86 matriculants and 31 graduates. The success of this school has been always and will be hereafter admitted by all. That it may soon issue its catalogue, with the customarily long list of matriculants, is much to be desired.

The abandonment of the thesis, as a prerequisite to graduation, is to be deplored. It deprives the School of many students and will continue to do so.

MISCELLANEOUS.

"Non Omnes Eadem mirantur Ament que."—Hor.

THE APPLICATION OF THE ACTUAL CAUTERY IN THE TREATMENT OF THE PEDICLE OF OVARIAN TUMOURS.—Mr. Baker Brown read a paper before the British Medical Association at its recent annual session on the treatment of the pedicle of ovarian tumours by actual cautery. This practice had been adopted by the author in thirty-six cases, twenty-three of which had previously been given to the Profession in two papers read before the Obstetrical

Society. Mr. Brown now gave in detail thirteen more cases. The following analysis will show the result of this treatment:— Of the whole number, five have died, of which two occurred in the first twelve and three in the present series. In not one of these had death resulted where the cautery had been used alone, with the exception of the second; here death was due to hæmorrhage from the site of an adhesion in the utero-rectal fold, which could not safely be reached by the actual cautery. In the remaining four, one or more ligatures had been used in addition to the cautery; the latter, from various causes, not having perfectly secured the pedicle. In these four, the causes of death respectively: 1. Peritonitis, with hypertrophied heart and thickening of aortic valves. 2. Peritonitis; no autopsy allowed. 3. General Peritonitis. 4. Shock; a small quantity of coagulated blood on the stump. Mr. Baker Brown drew the following conclusion from his experience of this treatment: That it is preferable in all cases first to employ the cautery. Should this fail, no harm has been done, and the ligature may be resorted to without disadvantage. The method of using the clamp was fully explained, and a newly-improved instrument was exhibited. This clamp possessed parallel blades, and the bone, formerly fixed to the back of the clamp to diminish heat during division, was now separated except by two long rivets, from the blades.—*Medical Times and Gazette.*

The Walled Lake of Iowa.—One of the greatest wonders of the State of Iowa is the Walled Lake, situated in Wright County, in the Northwest part of the State. It covers an area of over 2,140 acres, according to a late Government survey, and is nearly round, the longest diameter being from North to South. On the East side is a heavy belt of timber, which extends partially around the Lake, varying in height from four to twelve feet, according to the nature of the ground, and resembles somewhat the levees on the lower Mississippi, except in the materials used in its construction. The base of the wall is from fifteen to eighteen feet thick, and the top about four feet wide, built with great regularity and skill. It is composed principally of what is called rock boulders, or loose stone, and dirt, with the largest stones at the bottom, some being of great size; and, what is the best evidence of its artificial structure, is the fact that there is none of the rock used in its construction in the immediate neigbourhood. The Lake is from eight to fifteen feet deep, and very pure and clear, as you can see the smallest fish at the bottem of the deepest part. The bottom is covered with sand and gravel, and looks very beautiful. The Lake is fed by springs, and has two outlets, one at the Northeast, which runs

into the Iowa river, and one on the South side which runs into the Boone river. The level of the water scarcely ever varies. The water is from two to four feet above the general level of the country.

There can be no doubt but that the wall was formed by human hands, and was built around the springs which supply it, designedly to form a Lake. It was built, probably, by the race that built the Mounds in the West. However, it was at all times evidently a place of great resort for the Indians, as I have found numerous relics, such as stone axes, knives and arrow heads, pottery, etc., near it, of very ancient appearance, and not belonging to the present race of Indians. By whatever people built, they evidently possessed more than ordinary capacity, as the work is as perfectly and correctly made as would be done by modern architects. I have lived near the Lake for some eleven years, and during that period there has been no perceptible change in its appearance or level.—*St. Louis Medical Reporter.*

Causes of Idiocy.—While some writers are earnest in denouncing marriages of consanguinity as causative of idiocy and mental weakness, others hold a very different view. For instance, Dr. Donn, of London, (*Ranking's Abstract*) examined the history of 852 idiots, and found only one in fourteen to be the child of cousins. The action of alcohol on the brain of the parent would appear to be a much more potent cause. There is a popular notion that the performance of the generative act while the parents are drunk produces an idiotic offspring. That there is ground for such a notion might be inferred from the fact, that of 300 idiots in Massachusetts whose history was traced by Dr. Howe, one or both parents were drunkards in 140 instances. In a single family where both father and mother were drunkards, he found seven idiotic children.—*Pacific Medical and Surgical Journal.*

Tapping the Pericardium.—The London *Medical Times and Gazette* reports a case of this operation in the Leeds Infirmary. The patient, aged 26, had acute rheumatism with cardiac pain and large effusion. He was sitting up in bed struggling for breath, and at the point of death. Under the direction of Dr. Allbutt, Dr. Wheelhoue introduced a fine trocar opposite the centre of the left ventricle, "pushing it onwards till he could distinctly feel the movements of the heart with the instrument, and then, sheathing the point, he pushed the canula well up to the heart until he could both feel and see the impulse." The trocar being then wholly withdrawn the fluid escaped in a steady stream at first, and then

saltatim. Two and a half or three ounces of pale pink coagulable serum escaped. During the operation the patient gradually obtained relief, and after it he was able to lie down. The breathing fell to 36 and the pulse, before struggling and indistinct, was easily counted at 110. In 24 days he was discharged cured, with a slight pericardial dullness and a loud systolic souffle over the apex.

Opium in Therapeutics.—The practice of Physicians in America and in Great Britain, if not elsewhere, has changed very much in regard to the use of opium in fevers and some other forms of disease, within the last twenty or thirty years. Some remarks of Dr. Allbutt on this subject in *Ranking's Abstract*, referring to the use of this remedy in the Leeds (Eng.) Fever Hospital, so entirely accord with the results of our own experience, that we take the liberty of commending them to such of our readers as may still entertain something of the old prejudice: "One year ago," says Dr. Allbutt, "I looked upon opium in fever with much suspicion, granting its occasional value alone and greatly restricting its use. Gradually my fear of the restlessness overpowered my fear of the opium, and I have now ceased to regard the latter with any great apprehension. Continually I have witnessed the terrible havoc which a night's tossing makes in a little reserve of strength. Two such nights reduce it to a most precarious level, and few patients outlive three. On the other hand though I and my assistants have been for six months giving morphia at all stages of the fever to combat sleeplessness, I have never yet seen mischief result. I have never seen the power of taking food suspended by it, or the oppression increased. On the contrary, I have continually seen with pleasure, how, on the morning after opium has brought sleep, even during the first few days of the disease, the tongue has become moister, the headache less and the countenance more open. The sleep of an opiate is better than no sleep. Camphor is also a great favourite of ours. We find on the whole, that no medicine equals it in the low delirium often connected with feeble heart. We combine it with opium in low delirium accompanied with sleeplessness. Perhaps, however, the most striking in its immediate effects, of all the medicines which we have used, is that which we familiarly call *Graves' Medicine*. The combination of antimony and opium in the wild delirium of fever is advised by Graves in a well-known passage of the *Clinical Medicine;* and a marvelous one it is. Half a grain of morphia with one third or half a grain of tartar emetic, with repetition of half the dose if necessary, will bring quietness and sleep to a patient who, an hour or two before, was a raging maniac." We do not exactly agree with Dr. A.

that the power of taking food is never suspended by the remedy. But this is a small matter. The distinction between the grades of delirium is important, the combination with camphor being adapted to the low form, and with antimony to the wild and sthenic form.—*Pacific Medical and Surgical Journal.*

Rupture of Uterus.—Dr. Edward Whinery (*Amer. Jour. Med. Sciences* for Oct. 1866) describes a case of rupture of the uterus occurring during labour, in which he removed the child by gastrotomy, the child being dead. The woman recovered kindly and in four months was again pregnant. Labour ensued in due season, the waters coming away two days before the setting in of pain. As soon as the head entered the superior strait Dr. W. used the forceps, fearing to trust fully to the uterus. A healthy female child was born in an hour from the beginning of their application, and the mother did well.

A New Caustic.—Dr. Ellsworth, of Hartford, Conn., describes (*Philadelphia Med. & Surg. Reporter*) a plan of removing nævi, marks, discolorations, moles and other morbid conditions of the skin, without leaving a scar. It is done simply by burning with a common lens of two or three inch diameter. If the surface has not more than two or three square inches, one sitting suffices. The pain is not severe, and does not require anæsthetics. "I have seen one gentleman," says Dr. E., "who had a nævus on his face, extending from the eye to below the mouth, and involving the lower eyelid to the very edge, and covering four or five square inches of surface. It was of a deep cherry red colour, approaching purple, and covered with knobs of condensed tissue an eighth of an inch high. After two applications the spot has nearly disappeared, the skin generally having the hue of a surface, blistered some time previously, and it is now nearly well." An ingenious Yankee, named Barnes, not belonging to the Profession contrived the process.

Viburnum Prunifolium in Uterine Hæmorrhage.—In the *Atlanta Med. and Surg. Journal*, Dr. Phares of Mississippi, strongly recommends this plant to arrest abortion, from whatever cause, and to suppress uterine hæmorrhage. He uses the bark. The plant is common in the Middle and Southern States, flowering early in the Spring. Being allied to the wild cherry, it probably possesses some of the virtues of that tree. It is described as "nervine, antispasmodic, tonic, astringent and diuretic."

At the late meeting of the Medical Society of the State of New York, it was resolved—"That a Committee be appointed to investigate and report upon the result of consanguineous marriages," &c. If such marriages come under observation of any one he will confer a favour by answering the following questions, and transmitting such report, before November next, to Robert Newman, 118 W. Houston street, New York, one of the Committee appointed:

1. Name (initials) and age of husband. 2. Nativity. 3. Age when married. 4. Constitution. 5. Health, deformities, peculiar diathesis. 6. Health of his family, hereditary deformities, &c. 7. Name (initials) and age of wife. 8. Nativity. 9. Age when married. 10. Constitution. 11. Health, deformities, peculiar diathesis. 12. Health of her family, hereditary diseases, deformities, &c. 13. How are the parties related to each other? 14. How long married? 15. How many children, or sterility? 16. Abortions, cause, how many, and at what period? 17. Children died, at what ages and from what diseases? 18. The constitution, age and present health of living children, deformities, mental conditions, idiocy, cretinism, deaf, mute, blind, epilepsy, albinism, insane, &c. 19. Remarks and other information.

Baked Cotton Instead of Lint.—In the Southern army, during the war, when lint was exhausted, baked cotton was substituted and found to answer better. (Dr. Varney, in *Dental Cosmos.*)

The Treatment of Deformities of the Teeth, etc., is rapidly improving in the hands of scientific dentists. A case is narrated in the *Dental Cosmos* of a young lady whose front teeth so projected that she could scarcely cover them with her lips. A plate was adjusted in the roof of the mouth so that by turning a couple of small screws constant pressure could be kept up on the projecting teeth. In a few weeks the deformity was entirely remedied.

An Ingenious Bullet Detector.—A very ingenious piece of mechanism for the detection and extraction of bullets in wounds has been devised by Mr. Sylvan De Wilde. It seems that at the time Garibaldi was suffering from the effects of an undetected bullet in his limb, and pained by the fruitless efforts of operators to detect it, it occurred to several individuals of a philosophic turn of mind that electricity might very well be employed in the detection of metallic substances lodged within the human tissues. In France, M. Edmond Langlois, M. Favre, and Dr. Lecompte of the French Army Medical School at Val-de-Grâce, assisted by M. Rhumkoff,

all made use of it in the elaboration of suggestions on the point. There is this manifest advantage, that the structures of the body are non-conductive—a fact that renders the action of the electric current more perfect.

Mr. De Wilde has apparently produced the most practical result; and his instruments have been submitted to the naval and military authorities, who have made a complimentary report about them. The apparatus consists of a probe and forceps, a battery, and an alarum, contained in a box eleven inches long by three broad, and two inches and a half deep. The elements for the generation of a current, which remains constant for some weeks, are zinc and carbon. The probe, consisting of two steel wires, insulated from each other, is connected with an electric horse-shoe magnet and a bell, and when (introduced into the wound) it touches the bullets, the circle is completed, and the bell rings. The forceps act on the same principle, and are intended first to detect, then to seize, the bullet. They have curved points, and not pallets or spoons. The points of the probe are kept sheathed on introduction to a wound, and not uncovered till the supposed bullet is felt. This is effected by means of a sliding tube. The advantages of Mr. De Wilde's probe over others of its kind are very marked, and the army and navy officers will no doubt find it a great aid. The probe is a sensitive artificial finger, which enters deeply into the tissues, and gives the signal at once when it detects the hidden source of mischief below.—*London Lancet.*

Syrup of Phosphate of Iron, Quinia and Strychnia.—This is a valuable tonic, growing into extensive use in the Atlantic States and in Europe. It is particularly adapted for delicate anæmic children, and for all patients requiring tonics, and whose stomachs are intolerant of simpler preparations. Subjoined is the formula as contained in the last edition of Dr. Aitken's invaluable "*Practice of Medicine:*"—℞—Ferri sulph. dr. v: Sodæ phosph. oz. i: Quiniæ sulph. gr. cxii: Strychniæ gr. vi: Acid. phosph. dil. oz. xiv: Sacch. alb. oz. xiv.—Dissolve the Sulph. iron in one oz. boiling water, and the Phosph. soda in two oz. boiling water. Mix the solution and wash the precipitated phosph. iron till the washings are tasteless. Dissolve the Sulph. quiniæ in two oz. water, with sufficient dilute sulphuric acid. Precipitate the quinia with Aq. ammoniæ and carefully wash it. Dissolve the phosphate of iron and the quinia thus obtained, and also the strychnia, in the dilute phosphoric acid, and add the sugar, without using heat. One drachm of this contains one grain phosph. of iron, one grain

phosph. of quinia, and one thirty-second of a grain phosph. of strychnia. The minimum dose for an adult is a tea spoonful three times a day.

Tracheotomy in Apparent Death from Chloroform.—A French physician, M. Petrequin, in discussing the comparative merits of chloroform and ether ("Paris Journal Hebdomadaire") narrates the following remarkable case: A man aged fifty-eight years, was chloroformized "with precaution," for the excision of a tumour in the mastoid region. He had consumed less than two drachms of chloroform when the respiration became painful, and very soon ceased, in spite of sprinkling with cold water, friction, ammonia, etc. The lungs were inflated by means of a tube inserted in the larynx, without avail. The pulse ceased two minutes after the respiration and the countenance was cadaverous. Tracheotomy was then performed; no blood flowed from the incision: artificial respiration was established through the orifice. After some minutes the pulse returned feebly, then the respiration. The blood, which began to flow from the wound, passed into the trachea, without producing cough. Electricity had no effect, and the case appeared desperate. This state of thing continued an hour and a half, when the patient coughed for the first time and expelled a quantity of bloody mucus. He was then seized with violent cramps, grinding of the teeth, etc., but did not recover his senses till next day, when the wound was closed and respiration established by the larynx.

The Mythical Merlin.—If we give a sufficient amount of thoughtful study to the legends of the Western people of Europe, we find that their source is generally in the mythological stories which, under one form or another, passed current among the ancient Greeks and Romans, and, before their day, among the older Eastern nations. Going back to these rich storehouses of legendary lore, we find that there was a god, the grandson of Apollo, and the son of an inferior deity and the chief goddess of magic. This god was born in an island of Italy, where his mother reigned supreme. His name was Marsus. He was thoroughly acquainted with the virtues of plants, compounded remedies from them, and devoted himself to the healing of diseases. He was extensively celebrated for his skill in curing the bites of poisonous serpents. His incantations caused the reptiles to let go their hold, and his saliva applied to the wound immediately neutralized their venom.

From this deity arose a people who were called Marsi, and who possessed, equally with there distinguished progenitor, a knowledge of magic, of the science of medicine and the power to cure serpent bites. Under the Emperors they acquired so great a degree of celebrity that whoever could, without injury, hold a serpent in his hand, or knew how to prevent its biting, or who sold remedies capable of obviating the effects of its wounds, or who made medicines from herbs, or who, in any manner, followed the Profession of an enchanter, was called a Marsus. Thus it was that the serpent came to be regarded as the emblem of medicine—an emblem which holds its place to this day.

Milk Found in the Breasts of Infants.—In answer to your correspondent, Mr. Mitchell, regarding the above, I beg to state that on the 29th ultimo I was attending a male child, aged nine days, for obstinate constipation. Whilst manipulating the abdomen, I perceived the breasts unusually large. I examined them, and found a nodulated substance in each, about the size of a walnut.—Applying firm pressure, unmistakable milk exuded, to the amount of about half drachm, from each. The woman told me that her last child, now two years old, had the same when an infant. I was rather amused by the ready treatment the mother proposed to adopt. She said, "I must get a backening plaster for it; that is what I cured the other one with." Edward M. Owens.

In corroboration of the value of the treatment by Mr. Joseph Thompson, jun., for infantile lactation, I beg to state that I had lately a case in which the breasts of a female child were unusually developed at birth, and when she was seven days old they became hard, swollen, and nodulated. On the twelfth day they were larger than a full-sized walnut, and milk was easily pressed from the nipples, I desired the mother not to squeeze or in any way to irritate the glands; to apply bread-and water poultices, and to give attention to the infant's bowels. By this simple treatment the secretion and swelling gradually subsided, and entirely disappeared in about twelve days. W. Heath Strange, M. D.

London Lancet.

Bigelow's Operation for Ununited Fracture.—*Operation.*—The extremities of the false joint are to be attacked where they approach nearest to the surface, unless vascular or nervous trunks are in the way; in the arm, in all the cases I have seen, upon the outside; a free incision being contrived in each case with especial reference to the free exit of pus. In the arm, the musculo-spiral

nerve, which is often displaced and tied by the lymph, is to be carefully looked for and avoided, and were it not for the care here requisite the bone might be exposed by a single incision. The principal bony extremities being found, the interval, which is sometimes quite irregular and interlocked, is gradually divided, and the ends turned out, the dissection being materially aided by an assistant who powerfully flexes the false joint. As it yields, care is taken to prevent the muscles from being stripped from the periosteum, which they adhere to and aid in nourishing. When one extremity is fairly exposed, a crucial or other regular incision is to be made in the ragged callus which overlies the periosteum at its tip, which should be then seized by strong-toothed forceps, and efforts made to tear it out of the rugous inequalities of the formerly inflamed bone. After a little delay and dissection, the flaps begin to yield; with some coaxing the terminal adhesions are detached, and the sound bony shaft is reached, where the periosteum is only too-easily stripped from the bone, requiring great care lest the shaft should be denuded higher than the intended section. The soft tissues being now protected by spatulæ, or flexible strips of copper, the end of the shaft is removed by a common saw, the length of this fragment being determined by the amount of periosteum it has been necessary to detach. A half an inch of good cylindrical periosteum, with half an inch more ragged tissue hanging at its extremity, has usually covered from three quarters to an inch and a half of bone. Perhaps half an inch of sound shaft, with an irregular or conical extremity varying in extent, is a good rule for the excised piece in most cases. The other extremity is now to be turned out and treated in the same way, and this terminates the dissection, leaving only the wire to be inserted. For this purpose holes are bored in each extremity with a good bone drill, larger than the wire, at a little more than half an inch from the end, and through one wall only. A pure silver or plated copper wire is inserted from without inward in one end, and inversely entered in the medulla from within outward in the other; the size of the wire ordinarily used is No. 10 of Stubbs's iron wire guage. The ends are brought together accurately, and the wire twisted long enough to protrude at the external wound. The incision is then brought together by sutures, leaving an abundant exit for pus, and the apparatus is applied.—*Boston Med. and Surg. Journal.*

By a Richmond Physician, of large experience, it is stated, that pulverized resin is the best styptic known. It will succeed when all others fail. It is to be used on cotton or lint.

MEDICAL NEWS.

"Nulla Dies, Sine Linea."

ANALYSIS OF EARTH EATEN IN BORNEO.—Some few years ago the manager of the Orange-Nassau colliery, near Zandjermasin, in the Island of Borneo, found that many of his work-people (natives) consumed large quantities of a kind of clay; a sample of this material was forwarded to Batavia for analysis, and the following is the result in 100 parts:—

Pitcoal resin, (organic matter volatile at red heat)	15·4
Pure carbon " " "	14·9
Silica " " "	38·3
Alumina " " "	27·7
Iron pyrites " " "	3·7
	100·0

We remind our readers that the eating of clay is a custom to which savages—or, at least, human beings of a very low degree of development—are freely given in various parts of the world. No other analysis of any of the substances used as such have been made, or at least, if made, they have not been published. The resident military medical officer at the above-named colliery is strongly inclined to consider it the duty of the manager to eradicate and discountenance this habit of the workmen, as it appears to injure their health.

ESTIMATION OF SILVER IN A METALLIC STATE.—According to M. Classen, silver is wholly precipitated by cadmium; when dealing with a nitric solution of silver, evaporate to dryness in the presence of sulphuric acid, dissolve the sulphate of silver in boiling water, plunge into it a plate of cadmium, and the reduction of the silver takes place at once. The silver is deposited in a compact mass, easily washed with water; as it may contain a little cadmium, boil it in the acid liquid until no hydrogen escapes; wash it until the water contains no sulphuric acid; then dry, and calcine; the silver, at first a black grey, takes the metallic lustre; it may then be weighed:—the results are very exact.

ALUM CRYSTALLISATION OVER FRESH FLOWERS.—Make baskets of pliable copper wire, and wrap them with gauze. Into these tie to the bottom violets, ferns, geranium leaves, chrysanthemums—in

fact, any flowers except full-blown roses—and sink them in a solution of alum of one pound to the gallon of water, after the solution has cooled, as the colours will then be preserved in their original beauty, and the crystallised alum will hold faster than when from a hot solution. When you have a light covering of distinct crystals that cover completely the articles, remove carefully, and allow them to drain for twelve hours. These baskets make a beautiful parlour ornament, and for a long time preserve the freshness of the flowers.—*American Journal Pharmacy.*

The Empress Charlotte.—We regret to learn that the mental condition of the Archduchess Charlotte, Empress of Mexico, shows no signs of improvement. Under the stress of the peculiarly distressing symptoms with which mental alienation is accompanied in her case, the committee who have been charged by the Emperor of Austria with the administration of her affairs and her personal charge, have proposed to have a consultation of eminent European alienists, naming for the purpose—Dr. Griesinger, Berlin; Dr. Morel, Paris: and Dr. Maudsley, London.—*British Medical Journal.*

A New Knapsack.—An ingenious but simple mode of adjusting the soldier's knapsack has been devised by Dr. Dolmage, deputy inspector of army hospitals, and is worth attention. It aims at doing away with all superfluous belts and straps, and consists of a yoke made to fit the shoulders equably, and of a piece of leather to encircle the shoulder-joint, so as to allow the arm free play and avoid all impediment to either respiration or circulation. It has been submitted to the authorities for trial.—*London Lancet.*

Citrate of Soda in Glucosuria.—A French writer, quoted in *Ranking's Abstract*, recommends citrate of soda in daily doses of a half drachm to a drachm as a remedy in diabetes. It has been shown by analysis, he says, that sugar disappears from the urine when this salt is used with the food instead of common salt.

Chlorocarbon a Substitute for Chloroform.—Prof. Simpson (*Medical Times and Gazette*) has found the chloride of carbon, or chlorocarbon, to be nearly allied to chloroform in its physiological action. It is slower to act and its effects continue longer. It depresses the heart's force in a dangerous degree when used as a general anæsthetic. For topical use, however, it seems preferable. The vapor has been injected into the vagina and rectum, in painful

affections of those and the neighboring organs, with the best results. Ten to twenty drops injected subcutaneously were efficacious in relieving local pains, without producing the distressing nausea so often consequent on the use of morphia. The agent is but little known, and is not yet to be found in the shops.

Reproduction of the Crystalline Lens.—At the French Academy, in January, M. Raynal exhibited in the name of M. Milliot, a Surgeon in the Russian army, specimens of the eyes of dogs and rams, serving to demonstrate the reproduction of the crystalline lens. The animals having been chloroformized, the lens was extracted by rupturing the membrane and making slight compression on the globe. In order to retain the lips of the cornea in coäptation one or two sutures were made in the eyelids. The length of time required for the reproduction is not mentioned. We condense this statement from the *Gazette Hebdomadaire* of Paris.

Medical Graduates of 1867.—Following is a list of the number of graduates of the different medical schools in the United States, as far as our exchanges inform us:

University of Pennsylvania, 156; Jefferson Medical College 160; Bellevue, N. Y., Medical College, 148; University of New York, 75; College of Physicians and Surgeons, New York, 99; University of Maryland, 75; St. Louis Medical College, 53; Buffalo Medical College, 40; Missouri Medical College, St. Louis, 21; Miami Medical College, Ohio, 39; Ohio Medical College, 47; Charity Hospital Medical College, Cleveland, 25; Rush Medical College, Chicago, 72; Long Island College Hospital, 49; Massachusetts Medical College, 54; Georgia Medical College, Augusta, 22; University of Nashville, 56; University of Louisville, 45; Berkshire (Mass.) Medical College, 17; Chicago Medical College, 28. Whole number, 1271. There are about 12 other schools not named in the above list. Besides these, the Female Medical College of Pennsylvania had 10 and the New York College for women 9 graduates. Med. College, of Virginia, 24; Medical College, of South Carolina, 31.

Inverse Filtration.—M. Carey Lea, of Philadelphia, describes in *Silliman's Journal*, a novel process of filtration, and yet so simple that it is strange no one had sooner thought of it. A piece of muslin, with or without filtering paper, is tied securely over the funnel, and the funnel is then inverted in the liquid to be filtered, and pressed downward till the liquid filters into the funnel so as to

fill it. A flexible tube is then fitted on the point of the funnel and filled with water or other liquid and converted into a syphon. By increasing the length of the syphon the pressure may be increased and the rapidity of filtration increased accordingly. The process is called *inverse filtration.*

Effect of Altitude on Phthisis.—The beneficial influence of the light atmosphere of elevated localities on phthisical atients is becoming generally acknowledged. The Peruvian Government has established a military hospital in the valley of Jauja, 10,000 feet above the level of the sea, to which soldiers thus affected are sent from the sea-coast and from Lima. It appears from statistics (*London Med-Chirurg. Review*) that nearly 80 per cent. of such patients are cured. Phthisis is remarkably common and fatal in Lima and on the coast of Peru, causing nearly 23 per cent. of the entire mortality in the capital. The native Indians are singularly prone to it—a fact which has been observed on the Pacific coast of North America, especially where they are brought within the restraints and indulgences of civilized life. The editor of the *Med. Chir. Review* is in raptures over the reputed Elysian charms of the Jauja valley, which he thinks is the valley described in Rasselas; and he congratulates his readers on the possibility of reaching it almost without changing vessels, when the Americans carry out their project of running a line of steamers 2,500 miles up the Amazon.

Detection of Corrosive Sublimate in Calomel.—H. Brunewyn states that pure calomel will not affect a bright piece of steel, moistened with ether or alcohol, while one fifty-thousandth of corrosive sublimate will produce a deep black stain.—*Ex.*

Dr. Wm. A. Hammond has been appointed Professor of Diseases of the Mind and Nervous System in the Bellevue Hospital Medical College, and in the College of Physicians and Surgeons, New York.

The "Cincinnati Journal of Medicine" has been transferred to Indianapolis, and its name has been changed to that of the "Western Journal of Medicine." Dr. T. Parvin is the editor.

EDITORIAL.

"Nullius Addictus Jurare in Verba Magistri."—Hor.

Physicians have generally agreed, that whatever ethics may be violated in the act, the Proprietors of most newspapers and magazines will always admit advertisements into their columns in regard to that moral monster, empiricism, which, paradoxically, may die, but can never be killed.

The members of the Medical Profession are prepared to regard, with apathy, (the reasonable result of fruitless efforts to suppress quackery,) most of those advertisements which empirics are daily presenting for publication. There has been a long and protracted effort, on the part of Physicians, to destroy the vitality of empiricism, in all its Protean manifestations, but these struggles, it must be confessed, have been made in vain.

There is a class of advertisements, however, which all members of society should condemn, and which they would condemn, if Physicians, the proper pioneers in such an aggression, aroused their attention, so as to produce public remonstrances, in individual communities.

Reference is made to the class of advertisements, that, for obscenity of allusion and indecency of phraseology, can only be equalled by that reckless disregard of all moral and social claims, which gives to such advertisments their general circulation.

It is needless to describe these advertisements, they are as familiar as the names of their authors, who are, frequently, the notorious causes of that "melancholy ruin," which their philanthropy (for pecuniary considerations) is so sentimentally anxious to avert.

Editors and Proprietors of secular magazines and newspapers send, into the sacred circle of private families, advertisements whose phraseology must do irreparable injury to the moral sensibilities of all who read them; such advertisements having, also, attention directed to them, in the Editorial columns. Pure and modest females who, from childhood, are carefully guarded from all allu-

sions and words which must inevitably shock or destroy their innate and acquired sense of propriety, have this labour rendered ineffectual, by the reading of advertisements, whose subjects have been carefully concealed from them. The most disgusting allusions and obscene language form, conspicuously, the text of such advertisements.

Of the owners or controllers of such sheets, some are good citizens; some manifest a most praiseworthy morality, while others are open professors of the Christian religion; yet they daily place in view of the family circle subjects which, if even alluded to there, would provoke a just and summary ejectment.

If there were ignorance in regard to the statements made, there might be some palliation of the offence, but none better than the controllers of such papers know, that the promises and claims, thus urged, are false, dangerous and corrupting.

Were the claims of such advertisers true and just, it is questionable whether information, in such obscene language, should be admitted into papers coming immediately into the family circle.—Every candid Editor or Proprietor must admit, that custom alone has induced him to act, so entirely at variance with his inevitable convictions of moral and social right.

When the claims of such obscene impostors are admitted to be without any pretense to truth, their advertisements are yet admitted, for the poor reward, usually offered and with difficulty obtained.

There are a few Proprietors of papers, who have that high regard for public and private welfare, which induces them to prefer pecuniary loss, to a violation of those rights, justly belonging to every community. They are noble Pioneers in the cause of social justice and propriety; deserving that action, on the part of the public, which should make their present or immediate loss prospective gain.

It is most probable, however, that individuals, consentaneously and without formal appeals, would support cheerfully those sheets, whose advertisements did not violate the moral sense of their families.

So much for the facts and the comments that are universally made in regard to them. What is to be the remedy?

Communities and church organizations have already moved in this

matter, and their respectful requests have been heard with the most satisfactory results. It is strange that the medical Profession have not taken action in regard to those evils which do violence to their social rights and are, in addition, a just cause of offence to them as Physicians. Their philanthropy has never been questioned; it is universally admitted. They will not surely, in regard to evils which they should be among the first to remove, stand idly watching the efforts of those, not equally appreciative of the reasons for action? What is, then, the most judicious and efficient course for Physicians to pursue? They have organizations throughout the land, and if memorials be presented from these, it is not improbable that they would be received with respect, and produce the desired results; if not, these memorials could be presented to the Public, as advertisements, (or otherwise) by the many papers which would cheerfully publish them; these memorials, of course, being confined only to the suppression of the advertisements specified. To aim at the entire destruction of empiricism, by asking a suppression of advertisements not objectionable in language, is to ensure failure; experience has demonstrated this.

Medical Societies, Associations, etc., then, when others are at work, will surely not be idle. Their members are equally interested and not less philanthropic. The exposure and discomfiture of the obscene empiric should constitute a task peculiarly and pleasurably their own.

Much can be done by the Physician, in his private relations, with those who employ him, by calling their attention to this enormity. Some may sneer, some may be too ignorant to understand and appreciate the evil, but the educated, the moral, and the independent, will extend that hearty coöperation which, in itself, must be a satisfactory reward.

It is time, assuredly, that the medical man, in his private and public capacity, should take action in this matter.

NOTICES.

☞ The Editors of this Journal, after fairly trying a liberal policy, for the convenience of many whom the late war left without pecuniary resources, have determined to adopt a complete and permanent change.

Letters, in all respects polite, have been written to very many who had entirely neglected the liquidation of their accounts; to the writer of these letters, there has seldom been manifested the ordinary courtesy of a reply; yet such gentlemen have continued to receive the Journals sent to them. Such a course needs no comment, and each subscriber knows to whom the charges of injustice, discourtesy and illiberality are applicable. The Editors trust that these charges will be appropriately applied.

The credit system, under such circumstances, is therefore abandoned. Apart from its risks, which may be successfully borne, it entails an enormous correspondence upon the Editors, and this painful, expensive, and often futile labour, will no longer be performed.

Notice is then given, that no number of this (the fourth) volume, or of any future volume, will be furnished to any one, unless the amount of subscription is sent with the order. When the period of any subscription terminates, the Journal will be discontinued, unless the amount due for its continuance, is punctually forwarded.

The Journal will be discontinued to all who are in arrears, after the September number of the present year, and for the protection of the Editors, all means practicable will be instituted, for the collection of the amounts respectively due.

The special arrangements made with a few gentlemen, for this year, will, of course, be respected, and to them the Journal will be continued for the year; though it is asked, that, if possible, the the amounts due be forwarded.

The fact that the number who pay promptly is sufficient to fully sustain the Journal, when it is not sent to unremunerative subscribers, and the unsatisfactory experience in regard to those

who do not appreciate a credit extended to them, induce the Editors to adopt this course. All in arrears are respectfully asked to liquidate their accounts, long since due.

To all, the Journal will hereafter be furnished, only on the terms specified.

☞ All gentlemen whose letters require a reply, are respectfully requested to enclose a stamp. This stamp is but a small expense to the writer of the letter, while the very heavy correspondence which has been developed with the Journal Office, makes the cost of stamps a serious tax. This usual request has long been postponed. It is now made with reluctance, and it is hoped that all correspondents will recollect it.

☞ Short Articles.—It is requested, that articles contributed for this Work, should be brief and practical. With few exceptions, long communications are distasteful to readers and are generally neglected; it is difficult to make room for them. Papers of merit are retained for many months, when, if the valuable truths contained were briefly presented, they would be promptly published. It is the desire of the Editors of this Journal to increase, relatively, the Eclectic Department, and, to effect this, original papers of limited extent are preferable.

☞ Where manuscript is sent to the Editors of this Journal, all writers are respectfully requested to state whether remuneration is desired.

There is such a difference in the intention of those writing for this Work, that it is necessary to make this request.

☞ Notices to Subscribers, Advertisers, Contributors and Correspondents.

Those once ordering the Journal will each year be considered as subscribers, and the terms of his Journal adopted in regard to them. An order for discontinuing the Journal should be sent at least two months in advance. As is usual, no subscription or advertisement will be discontinued until arrears are paid.

The Publishers assume the risks in regard to all amounts sent by mail, if the packages or letters are registered. When practicable, all sums to be so sent should be deposited with the Postmaster, and the "money order," obtained from him, transmitted.

Receipts for all amounts transmitted, will be sent in the Journal, for the succeeding month.

It is desired to obtain for this Journal one Agent in every City and Town.

To each Agent there will be allowed twenty per cent. of the amount due for each subscription or advertisement.

For the accommodation of the Profession, there will be furnished, with this Journal, one or more American Journals, including the reprint of the London Lancet, at ten per cent. less than the aggregate cost of the additional Journals desired.

All communications sent by mail should be directed to Dr. E. S. Gaillard, Locked-Box 32,

Richmond, Va. Those to be delivered personally, should be left at his office, 404 Franklin Street, between Fourth and Fifth Streets.

European packages, sent through Trubner & Co., 60 Paternoster Row, London, or J. B. Bailliere et Fils, Rue Hauterfeuille, Paris, will be safely forwarded.

It is expected that all expenses will be paid on packages, foreign and domestic, sent to this Journal.

All contributions or papers, intended for insertion in the next Number of the Journal, should be received by the middle of the month preceding.

Contributions for publication must bear the signature of the writer, and must be communicated to this Journal exclusively.

Original articles should be written on one side only of each sheet, and the manuscript should be, by the sign (¶), divided into paragraphs.

Contributors can have forwarded to them, at a small expense, one hundred or more copies of their articles, in pamphlet form, provided the order to this effect be received before the period o publication.

The Journal will be sent a second time, when not received one month after the usual period of its appearance.

Rejected manuscript will be returned, if desired, by mail or Express, at the expense of the writer.

Each subscriber will give at length his name, Post Office, County and State.

☞ This Journal is published as a Monthly octavo of ninety-six pages. It is now the larges Medical Monthly issued in America.

The Editors offer to pay, at the HIGHEST JOURNAL RATES, for ARTICLES, ESSAYS, CORRESPONDENCE and REVIEWS OF RECENT WORKS.

The terms of this Journal have been changed; see notice on the cover.

BOOKS AND JOURNALS RECEIVED.

Railway and other Injuries of the Nervous System. By John Erichsen, Fellow of the Royal College of Surgeons, etc. Philadelphia. H. C. Lea. 1867. From Publishers.

Announcement of the University of New York, 1867—1868, with Catalogue for 1866—'67.

Announcement of the University of Maryland, 1867—'68, with Catalogue for 1866—'67.

Essentials of the Principles and Practice of Medicine. A Handy Book for Students and Practitioners. By Henry Hartshorne, M. D., etc. Philadelphia. Henry C. Lea. 1867. From the Publishers.

The following domestic Exchanges are regularly received:

The Atlanta Medical and Surgical Journal, Ga.
Boston Medical and Surgical Journal, Mass.
Braithwaite's Retrospect, New York.
Buffalo Medical and Surgical Journal, New York.
Chicago Medical Journal, Illinois.
Chicago Medical Examiner, Illinois.
Cincinnati Lancet and Observer, Ohio.
Druggist's Circular and Chemical Gazette, Philadelphia, Pa.
Galveston Medical Journal, Texas.
Journal of Applied Chemistry, Philadelphia, Pa.
London Lancet—Reprint—New York.
New York Medical Record, New York.
New Orleans Medical Journal, Louisiana.
New York Medical Journal, New York.
Pacific Medical and Surgical Journal, San Francisco, California.
St. Louis Medical and Surgical Journal, Missouri.

Southern Journal of the Medical Sciences, New Orleans, Louisiana.
Southern Medical and Surgical Journal, New Orleans, La.
The American Journal of Pharmacy, Philadelphia, Pa.
The American Journal of Medical Sciences, Philadelphia, Pa.
The Dental Cosmos, Philadelphia, Pa.
The Detroit Review, Mich.
The Medical and Surgical Reporter, Philadelphia, Pa.
The St. Louis Medical Reporter, Mo.
The Western Journal of Medicine, Indianapolis, Ind.
The Journal of Materia Medica, Lebanon, N. Y.
The Leavensworth Medical Herald, Kansas.
The American Journal of Dental Science, Baltimore, Md.
The Quarterly Journal of Psychological Medicine, N. Y.

FOREIGN EXCHANGES.

The London Lancet.
The Ophthalmic Review, London, Eng.
The Medical Mirror, London.
The Canada Medical Journal, Montreal.
The Dublin Quarterly Journal of Medical Sciences, Ireland.
Le Mouvement Medicale, Paris, France.
Journal de Medicine Mental, Paris, France.
Revue Medicale, Paris, France.
Revue de Therapeutique Medico, Chirrugicale, Paris, France.
The Medical Press and Circular, Dublin, Ireland.

MISCELLANEOUS.

The American Naturalist, Salem, Mass.
De Bows' Review, 80 Broadway, New York.
Richmond Eclectic, Va.
The Planter, Richmond, Va.
The Farmer, Richmond, Va.
Littell's Living Age, Boston, Mass.

AGENTS.

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ORIGINAL COMMUNICATIONS.

"Qui Docet Discit."

ART. I.—CLINIQUE OPHTHALMOLOGIQUE DE LA FACULTE.* (Translated from the French of Dr. Paul Heurteloup). By A. M. FAUNTLEROY, M. D., Staunton, Va.

Sympathetic Ophthalmias.—I ought, in this lesson, to occupy myself with sympathetic ophthalmias, an affection of great moment, and unhappily very frequent. By this expression of sympathetic ophthalmia, I do not embrace all the affections which attacking at first one eye, can influence indirectly the sight of the other. Thus one eye inflames and becomes the seat of conjunctivitis, keratitis or iritis; some hours or some days later, the other eye becomes the seat of the same affection. This is not an instance of sympathetic ophthalmia, but they are simultaneous ophthalmias, proceeding from a common cause.

The same may be said of certain disturbances of the vision, occurring under the influence of disorders of the digestive tube, urinary apparatus, the skin, or the fifth pair of nerves. These troubles of vision pointed out by Mackenzie, Richter, Plater, Wardropp, Demours, Margagni, etc., etc., are not comprehended in the class of sympathetic ophthalmias.

Under this title I comprehend the disturbances of vision, appearing in one eye, as the result, it may be, of traumatic inflammation,

* Revue De Therapeutique Medico-Chirurgicale, July, 1867.

or it may be even of spontaneous inflammation of a portion of the deep tissues of the opposite eye. There are two kinds of sympathetic ophthalmia, one traumatic, the other spontaneous.

Before entering upon a complete history of this curious malady, I ought to tell you that it is not an old discovery, for if sympathetic ophthalmia was reviewed by Brisseau, Richter and Demours, it has been clearly described only by Mackenzie, who has sought to explain its nature, and called attention to the importance of its therapeutics. Subsequently to the works of Mackenzie, the history of sympathetic ophthalmia has been completed by the researches of Wardropp, Pritchard, Chitchett, in England. In France, Savignot has published an essay upon sympathetic iritis, 1849; M. Doctor Reindford has published, in 1855, in the *Bulletin du Nord*, seventy-five cases of sympathetic ophthalmias, fifty-five in consequence of traumatic affection, and twenty following spontaneous affection. In 1858, M. Brondeau published a thesis upon the same subject; in 1866, M. Doctor Rondeau sustained, handsomely, this subject *upon the reflex ocular* affections, and upon sympathetic ophthalmia.

In fine, I would direct your attention to another thesis, more recent, upon the wounds of the ocular globe, in which M. Doctor Dublanchet, has appropriated a chapter to the influence of the wounded eye upon its congener, that is to sympathetic ophthalmia.

Sympathetic ophthalmia presents several varieties, which we are able to classify, as six in number:

1st. The sound eye becomes the seat of a slight disturbance, accommodation is made with difficulty, and above all is transient; an ophthalmoscopic examination reveals that the eye is sound. This disturbance, at first ephemeral, may become permanent, and is then designated *amblyopia without lesion.*

2nd. The subjective phenomena are the same, accommodation painful, tension, photophobia, amblyopia; but the ophthalmoscope discloses a reddened condition of the bottom of the eye, with an injection of the retinal vessels, *amblyopia with congestion of the choroido-retina.*

3d. Besides the symptoms which I have just given, you will find a lachrymal eye, with a tarnished or clouded cornea, being the seat of pain which radiates even to the temple; around the cornea a red

zone, painful upon pressure, corresponding to the ciliary circle; the iris clouded, projecting forwards and furrowed by large veins, posterior synechia; besides, an examination of the bottom of the eye exhibits clearly an impairment of the vitreous body. This form can be designated under the name *iridocyclitis.*

4th. The symptoms are more pronounced, iris clouded, pupil dilated and filled up with an exudation clouding the aqueous humour, the synechial adhesions are increased, the globe is hard, tense, and if an ophthalmoscopic examination is made we will discover a commencing glaucomatous excavation.

5th. We have in this class all the signs which we have recounted in the preceding form, but the glaucomatous excavation is much more marked; the crystalline lens has become opaque; the vitreous humour no longer admits of the passage of light, in certain cases, we observe a detachment of the retina. All of these lesions occurring, we designate them *irido choroiditis.*

6th. In this class the external signs are nearly negative, but the ophthalmoscope enables us to recognize retinal exudations, atrophied choroidal disks, etc.; in a word, the signs of *choroido-retinitis.*

These various forms are oftentimes only degrees of the same affection, for if sympathetic ophthalmia can arise in many ways, it may very readily induce an alteration of all the tissues of the eye, staphyloma, detachment of the retina, cataract and atrophy of the eye, if the Surgeon does not interfere. The diagnosis is not difficult, for the objective signs furnished by the ophthalmoscope disclose the nature of the affection with which we have to deal. But it remains for us to discover if the lesion is sympathetic or spontaneous. Here the antecedents would guide us. Thus the lesions of sympathetic ophthalmia may manifest themselves in an eye, after its congener has been destroyed in consequence of traumatism; it may be an old and profound injury, which led to the entire ramollissement of the ocular globe. What are the causes of sympathetic ophthalmia, or rather some of the lesions, potential in the destruction of one eye, which are capable of destroying the opposite eye? Mackenzie thought that sympathetic ophthalmia could only manifest itself when one eye had been lost in consequence of traumatism; but numerous observations conspire to prove that the circumstance

of traumatism is not indispensable, and the spontaneous loss of an eye is sufficient.

Thus we have observed sympathetic ophthalmias arise when an eye had been lost as the result of irido-choroiditis, chronic iritis, false glaucoma, and particularly from simultaneous staphyloma of the cornea and sclerotica, in consequence of purulent ophthalmia dating from infancy. (Walton.)

All wounds of the globe are not followed by sympathetic symptoms. Thus it is very seldom that they occur after an operation, although Critchett has reported two cases following the extraction of cataract, but during the operation, prolapsus and hernia of the iris occurred. The wounds, by contusing instruments, those which rend the ocular globe, appear to predispose, especially, to sympathetic ophthalmia.

The location of the wound is not without influence; thus the point of election is the ciliary region. Wounds of the cornea are rarely followed by sympathetic symptoms, unless a foreign body should be embedded there, as in the following instance, which you have observed in No. 8 of Saint Martin's ward, in the hospital St. Louis.

The case is that of a man, forty-three years of age, who had felt for some months a growing feebleness of vision, when on the 18th July, 1866; he received a splinter of glass in his left eye from a siphon of mineral water, which was broken in his hands.

The wound of the globe was a little blood-shot when this patient entered the Cochin hospital, where, despite antiphlogistic treatment, calomel internally, and frictions with the Neapolitan ointment, the symptoms became so grave that in thirty-two days after the accident the sight was destroyed. The left eye continuing a little red, this man consulted M. Dolbeau, who foreseeing sympathetic symptoms, advised him to have the eye extracted; not consenting to the operation he confided himself to the care of M. Bourrousse de Laffore, who ordered for him a dozen leeches, a collyrium of nitras argenti and belladonna frictions. Despite this treatment periorbital pains manifested themselves, and a collyrium of sulphas zinci. and tinctura opii. was prescribed for him by M. Liebreich. In the month of January the patient commenced to perceive that the sight

of his right eye was annoying him, mists appeared, and the pains, intra and periorbital, increased in intensity, therefore he decided to enter the hospital St. Louis.

You have observed that the wounded eye exhibited a deep white cicatrix, directed from below upwards, and from without inwards, which occupied all the inferior portion of the globe, and impeded the movements of elevation. The cornea was clouded, touching the iris, which occupied the pupillary field and adhered to the cicatrix. The right eye, examined by the ophthalmoscope, presented the signs of slight choroiditis, a little disturbance of the vitreous body, slight infection of the optic papilla, no pigmentary collections, no hæmorrhage. This man distinguished objects with difficulty, and could barely read the No. 15 upon the staircase of M. Giraud Teulon. We will add, in order to complete the history of this patient, that he bore upon his left thigh a cold abscess.— The 25th of February I extracted the left eye by the method of Bounet, and you have seen how simple and expeditious the procedure. Shortly afterwards an artificial eye was inserted without occasioning any periorbital pains; the sight of the right eye quickly improved, for he read the No. 2, and with some pains he read the No. 1.

An ophthalmoscopic examination exhibited plainly a considerable improvement, for the injection of the membranes has diminished, and the vitreous humour is much less impaired. In another case, the presence of a foreign body was not necessary to produce the trouble, but the formation of cicatricial bands which pulled the cicatrix, and predisposed and excited to sympathetic ophthalmia. A case of this kind presented itself in the person of a patient, whom you have observed at the hospital St. Louis, St. Martin's ward, No. 14.

This patient, 44 years of age, had been afflicted in 1861, with a malignant pustule of the left lower eyelid, which was cauterized with the red iron, by M. Maisonneuve. During his stay at the hospital, which was three months, he suffered a little from photophobia in the right eye, but it was very brief in duration.

In 1866, that is to say, five years after the loss of the left eye, this man experienced some pain around the right eye; the vision

was impaired, muscæ volitantes were seen; use of the eye was painful and caused lachrymation. Treatment with the sulphas atropiæ, pills of the sublimate and aloes, flying blisters to the temple and neck, seemed to arrest for a short while the march of the disease. When he entered the hospital you noticed an atrophy of the globe of the left eye, softened, and easily depressed, with an opaque cornea, and the lower lid almost destroyed; but there was a reddish bridle between the stump of the eye and the remainder of the lower lid, of such size that it was impossible for the eye to roll itself inwards. All around the orbit there was a cicatricial band, smooth, shining, and bluish. The right eye presented a pericorneal zone, very marked; the iris was normal in colour, and readily dilated under the influence of sulphas atropiæ. With the ophthalmoscope slight choroiditis was observed, the optic papilla was a little deformed, bluish, and the vitreous humour exhibited some floating bodies. Unfortunately this patient could not read, and we were unable to discover the exact state of vision; but he could not distinguish even large objects. In view of such symptoms I decided to extract the left eye. I first cut the cicatricial band, then I cut the external commissure of the lid, in order to facilitate the extraction of the eye; and above all to facilitate the application of an artificial eye. After the first insertion, the operation is done without difficulty. The results of the operation have been most happy, and you observed that the patient had greatly improved, for he could very readily distinguish all objects at his departure from the hospital. The sympathetic phenomena supervene at three different periods. Thus in some very rare cases they commence in the early days of the accident. In other instances they only occur, as you have observed in our second patient, after some years; but in the majority of cases, the troubles of vision are chronicled within the first two months.

The march of sympathetic ophthalmias are slow, but it happens oftentimes that they are very insidious, and that after having progressed slowly the symptoms succeed one another with frightful rapidity.

Certain ophthalmologists have thought that infancy was a security against sympathetic symptoms, but M. Rondeau has asserted the

fact, that not only are infants more liable to such disturbances, but the progress of the phenomena is frequently more rapid than in adults.

How far the general health is influenced by the occurrence of such symptoms, I dare not say; but I believe that the pain and irritation of the eye plays an important rôle. What mechanism can explain the appearance of these sympathetic ophthalmias? It cannot be denied that this is the most obscure point in the history of the affection. Are we able to agree with Mackenzie, that the inflammation of the retina propagates itself, by continuity of tissue, to the optic nerve through the optic chiasm, and expends its force upon the retina? Now this is not exact.

We cannot admit any longer that inflammation is able to propagate itself by the blood vessels and produce a congestion to bring about the troubles of vision.

The explanation which has appeared the most rational, for it is sustained by physiological data, induces the conclusion, that the troubles supervening in the sound eye partake of the reflex phenomena, occasioned by the pulling and irritation of numerous nervous filaments. This theory is rendered more admissible because the wounds which occasion most of the sympathetic symptoms, are those which affect the region of the ciliary zone, iris, the ciliary muscle, and choroid, in which the net-work of small nervous filament is so very extensive. In symptoms so serious, the termination of which is oftentimes fatal, the surgeon is not powerless, and can, if unable to restore all the functions of the eye, at least arrest the progress of the disease. In order to accomplish this result, there is but one means; extract the ocular stump or the globe which has been the point of departure of these symptoms.

You can readily understand that there is no treatment however energetic, instituted against the symptoms supervening in the sound eye, which can lead to any other result, because you do not dissipate the nervous irritation which is the origin of the sympathetic ophthalmia. On the contrary, remove the cause, and the effect will cease; but you bring about this result by removing the ocular globe.

Some time since veterinary surgeons discovered that when a horse

lost the sight of an eye from traumatism it became necessary to destroy or remove the globe, for fear of witnessing the loss of the other eye.

Wardropp observing this practice, thought it could also be applied to man. I accept entirely this operation, and I regard as even very unfortunate the amelioration which we may obtain by medical treatment, for we encounter the grave inconvenience of returning to an operation, which is the salvation of the patients. I only make this qualification; that the sympathetic ophthalmia being spontaneous, we are able to abort altogether in the beginning its symptoms.

I will not make an expose of the operative manual. You have seen me extract the eye, and you know very well how simple the operation is; incise the conjunctiva, the tendon of the right internal muscle, cut around in order to sever the other tendons, and terminate the operation by severing the optic nerve. The result of this enucleation is so very simple that we can at the end of a very few days insert an artificial eye.

Some surgeons have proposed to excise the anterior portion of the globe, all the ciliary region; this procedure has yielded some success, but has sometimes failed, because it has not removed the ocular stump, a foreign body, and could not arrest the symptoms.

Acting in accordance with the theory of Mackenzie, section of the optic nerve has been performed, with successful results.

M. Rondeau, putting in practice the opinions set forth by M. Brown-Séquard in his lectures upon the paralysis of inferior members, tried not only the section of the optic nerve, but also of the ciliary nerves which encompass it.

I believe, notwithstanding the experiments and operations made by M. Rondeau upon the dead body and upon animals, that this section cannot be performed without much difficulty, nor is it exempt from dangers.

The result of the extraction of the eye is not always as fortunate as that which we have obtained for the two patients of whom I have given you the history; but the operation can at least check the progress of the symptoms.

To promote the success of the operation, and in seeking to combat by appropriate treatment, the affection started in the non-

wounded eye, the surgeon should not fear, for example, to practice iridectomy if the tension of the eye should occasion apprehension of some glaucomatous symptoms.

ART. II.—"WHY DO NOT GUN-SHOT WOUNDS HEAL BY QUICK UNION?" By PAUL DELACY BAKER, M. D., Eufaula, Ala.

The April number of this Journal contains a very interesting article upon this subject, from one, for whose sound judgment and eminent abilities, we all entertain the highest respect. The accredited teachings of philosophy are adduced and applied with such force and skill to the proposed elucidation of the question, and the theory advanced seems so simple, plausible and well calculated to explain the cause of the most marked and constant phenomena presented in gun-shot wounds, that it is with hesitancy and only after much reflection, that I venture to offer a contrary explanation and advance facts and arguments adverse to Prof. Chisolm's opinion, as to the cause of the persistent suppuration in gun-shot wounds. In doing so, I am actuated by no mere spirit of criticism and am alone prompted by the desire, that the character of such injuries be properly appreciated, in order that fixed principles be established for our guidance in their management.

From close observation and earnest experimenting, Prof. Chisolm has been led to believe, that a gun-shot injury is something more than a contused and lacerated wound, and that the cause of the constant sloughing and suppuration resides in the additional complication. Further investigation has led him to the conclusion that the additional complication is to be found in the fact, that balls, at full velocity, in impinging upon and passing through animal tissues, are heated to such a degree as to sear the flesh to the extent of necessitating sloughing and suppuration.

The experiments and announcements contained in Prof. Tyndall's work, "Heat considered as a mode of motion," are adduced in support of the correctness of this opinion; and, as quoted in the article, teach—

"That a musket-ball will be heated if made to fall a short distance and in quick succession upon an iron slab.

"That the heat thus generated is due entirely to the destruction of the moving energy which the ball possessed when it struck the iron plate.

"That the amount of heat thus generated has been accurately calculated, and, that it is found, that a ball of lead falling through 772 feet, would generate (upon striking an iron plate I presume) heat sufficient to raise *its own temperature* 30 degrees or 1 degree for every 26 feet of fall.

"That if the motion be imparted to a body by any other means than gravity, the destruction of such motion would also produce heat.

"That a rifle bullet when it strikes a target is intensely heated.

"That the mechanical equivalent of heat enables us to calculate with the utmost accuracy the amount of heat generated by a bullet (upon striking an impenetrable target I suppose) when its velocity is known.

"That the heat generated by the collision of a moving body increases as the square of the velocity.

"That the greatest velocity imparted to a body by gravity in falling through 772 feet is, in round numbers, 223 a second.

"That six times this quantity, or 1338 feet a second, would not be an inordinate velocity for a rifle bullet.

"That a rifle bullet, if formed of lead, moving at a velocity of 223 feet a second, would generate on striking a target, an amount of heat, *which if concentrated in the bullet*, would raise its temperature 30 degrees; with six times this velocity it will generate 36 times this amount of heat; that hence thirty-six times thirty, or 1080 would represent the augmentations of temperature of a rifle ball on striking a target with the velocity of 1338 feet a second, if all the heat generated were confined to the bullet itself.

"That, this amount of heat would be *far more than sufficient to fuse the lead*, were it not equally divided between the ball and the target."

[The foregoing condensed extracts while not verbatim are, nevertheless, sufficiently accurate to render them correct. The italics are my own.]

Now, in attempting with these teachings, to explain the effects of gun-shot wounds upon animal tissues, it is important to determine and remember, if, by "the destruction of the moving energy," Prof. Tyndall means the abrupt and absolute arrest of the progress of the missile. Also, if by "a ball" and "a body," he means something equivalent in weight and material to the musket ball he first alludes to. Also, if, by "a target," he means an impenetrable iron slab or other obstacle capable of suddenly and completely stopping the motion of the ball.

In this connection, it is legitimate, also, to inquire, why if the greatest velocity imparted to "a body," by gravity, in falling through 772 feet, is 223 feet a second, and, if a ball of lead in falling through 772 feet would generate heat sufficient to raise *its own temperature* 30 degrees, why a rifle bullet, if formed of lead, and moving at the same velocity, viz: 223 feet a second, would not also raise *its own* temperature 30 degrees, independent of the heat generated in the target by the collision? In the former instance, it may be seen, that Prof. Tyndall says the ball would raise *its own* temperature 30 degrees, and, in the latter, that the 30 degrees would not be concentrated in the bullet, but that the amount would be divided between it and the target.

The fact, that a hundred pound iron ball, if fired from a rifle cannon against an impenetrable iron target, is found hissing hot immediately after the collision, or, that much heat is evolved by the striking of an ordinary rifle ball, at full velocity, against an impenetrable material, affords, it seems to me, rather doubtful criteria for determining, that a rifle ball in passing, at full momentum, through the soft, yielding, and comparatively unresisting animal tissues, will be heated to that intense degree necessary to sear the flesh by a mere momentary contact.

A sledge hammer may be heated to a high degree by frequent and forcible blows upon an anvil. It will be less heated by pounding with the same force and frequency a wooden block, and still less by mauling the earth, and even less, yet, by beating the flesh of a horse. In this latter instance, however, sloughing and suppuration might reasonably ensue, not, though, I apprehend, as the result of any burning effect of the experiment.

But, let us leave off this system of speculation, and try and ascertain what satisfaction may be derived from applying the burning theory to the elucidation of certain given cases.

First, then, I will take a familiar case, the one in which a rifle ball, at its greatest velocity, just touches the surface of the body or of a limb, producing a short and shallow groove in the skin, and perhaps cellulo-adipose tissue. In this instance, we have all the usual phenomena (as to effect upon soft tissue) presented by gun-shot wounds; that is, characteristics very closely resembling those of a burn, both in appearance and results.

Now, if this wound be seared, we can but be amazed at the degree of heat concentrated in the ball, when we remember, that in the application of the actual cautery for the establishment of an issue of any permanence, the mere instantaneous application of the white iron will not suffice for the production of the result desired; yet, the moment of time in which the ball was in contact with that wounded surface, is absolutely inappreciable in its brevity. But a greater difficulty is yet to be encountered. It must be remembered that in order to have rendered the ball, in this instance, searing hot, its moving energy must have been, if not "destroyed," at least greatly interrupted and arrested. Such was, however, most assuredly not the case. The momentum of the ball would hardly be affected by so slight and momentary a contact with the skin.—Nevertheless, a wound thus produced, will as certainly slough and suppurate as will the one inflicted by a ball's plunging into the firm, compact tissues of a muscular thigh.

CASE 2.—A rifle was fired in a yard, and the ball, at very short range, struck almost squarely against a hard, smooth stone in the underpinning of the kitchen, and glancing, entered the soft tissues of the naked foot of a negro woman who was standing within three or four feet of where the ball first struck. The ball was extracted without difficulty and the wound healed by quick union. In this instance, the moving energy of the ball, at short range, was suddenly and almost completely destroyed by an impenetrable object, and instantly thereafter, the missile entered the flesh, producing, however, only a simple, penetrating wound, which healed promptly and without suppuration. According to the teaching, would not the

ball have been burning hot when it entered the woman's foot, and would not suppuration inevitably have resulted from the searing of the wound?

CASE 3.—A soldier at the seven days battle around Richmond, in '62, upon going into one of the fights, placed two extra packages of cartridges in the breast pocket of his shirt, in order, as he said, to secure an abundant supply of ammunition. A minnie ball of the largest size at short range, struck fairly against the extra packages and laid the gallant fellow *hors de combat*. He was brought into the Alabama hospital, and the effects showed beyond question, that the ball had struck with full force. The packages were torn to pieces and some of the balls impacted against and adherent to each other. The whole side of the soldiers' thorax was bruised and blackened by the force with which the mass had been driven against his chest, and the consequent concussion injured his lung as was evidenced by bloody expectoration. Here, the immense momentum of the largest sized minie ball was suddenly and entirely arrested. According to Prof. Tyndall, would not 1,080 degrees of heat have been generated by the collision, in and among those broken up cartridges, and if so, would not the powder have exploded?

CASE 4.—A large muscular soldier entered the Alabama hospital, suffering from a gun-shot wound, which produced compound comminuted fracture of the femur, of which injury, he speedily died. The thigh was dissected and the entire os femoris removed; the bone was found broken into seven pieces, the fractures involving the entire bone. Against one of the largest fragments, consisting of the anterior and middle portion of the shaft, lay a large ball, greatly flattened, lapped against, and closely adherent to the convex surface of the bone. It was evident to all observers, that the missile must have been moving with great momentum when it plunged into the thigh and against that bone; the fact of the bone's having been smashed by the concussion, into seven distinct fragments and the extent to which the ball was flattened and lapped against the bone proved this. Here, then, the moving energy of a ball flying with immense velocity, was suddenly and completely destroyed by its coming in contact with "a target" of the poorest conducting power, consequently, the heat generated by the arrest

of the mechanical motion of that ball, must have been chiefly concentrated in the missile, and according to Prof. Tyndall, a mass of fused lead should have been found about that bone and much evidence of charred tissue. There existed, however, nothing of the kind.

In endeavouring to ascertain to some extent, the degree to which rifle balls are heated upon striking a target, I, to-day, instituted the following rough experiments, using the Wesson rifle and the "Howard Thunderbolt," guns of immense range and power. The balls were first fired at short range, against an impenetrable steel target. By the collision, the balls were scattered into numerous and very minute laminæ, some of which fell upon bats of raw cotton filled with powder, and placed directly against and beneath the steel plate. No scorching or ignition occurred. Still, the little leaden laminæ were so minute and attenuated as to render this experiment unsatisfactory.

Next, a target of hard, seasoned pine, one and a half inches thick, was employed; two inches to the rear of this board was placed the piece of steel and the intervening space was filled with raw cotton, charged all through with powder; the balls were then fired through the wooden target, and passing directly through the cotton were arrested against the steel plate; frequently the balls were found entangled in the cotton and surrounded with the powder. There occurred, however, no scorching, burning or ignition of any kind. Many similar experiments were tried with like results.

In these cases, the balls possessed all the heat generated in them by the explosion of the powder and by the friction produced by their passage along the gradually decreasing calibre of the barrel and by the destruction of their moving energy, after their escape from the gun. These combined causes generate heat sufficient to render the leaden balls much softened, still they could be handled immediately after contact with the target, but were found quite hot. I contend, however, that any metal, that is sufficiently heated to sear the flesh by a mere momentary contact, will scorch the fibres of raw cotton, or ignite powder if allowed to remain in immediate and continued contact with these substances.

No cotton was set on fire, as I remember, in 1862, when the gun-boats in the James river tested the efficacy of tiers of cotton bales as fortificotions.

If gun-shot injuries are not seared wounds, what, then, is their nature, and why is it that they do not heal by quick union? A correct elucidation of these questions is, I believe, to be found in the fact, that gun-shot injuries, inflicted by balls in full momentum, are lacerated and contused wounds, the laceration and contusing being so severe as to ensure the molecular death of the tissues that the missile comes in contact with.

A brief and well directed consideration of the nature of lacerated and contused wounds, will, I believe, readily explain all the difficulties and seeming inconsistences that oppose such a classification of gun-shot injuries. All teaching, observation, and experience, warn us, that sloughing and suppuration may be apprehended in the injuries under consideration, that is, in lacerations and contusions, and, that such results (other things being equal) are entirely dependent upon degree: for example, in contused wounds, there are all degrees of severity from slight and harmless ecchymosis, to extensive and destructive disorganization. All degrees of contusion, short of destroying the vitality of the tissues, may be recovered from through the process of resolution, and all degrees beyond that point, must necessarily result in suppuration, if life continue. So, in lacerated wounds, all degrees are found, from simple solution of continuity by tearing, to the most frightful rending and mangling of the tissues; and, as a matter of course, we have all results following such injuries, from ready union to the most fearful and destructive sloughing and suppuration, if life continue.

Now, a gun-shot wound combines in itself laceration and contusion, and according to the locality injured and the size of the ball and its degree of velocity, we have all grades of laceration and contusion from the simple penetration and bruising of the soft parts to their most extensive rending and complete pulpification; consequently, in the recoveries from these injuries we find all degrees of recuperation from quick union to the unsightly and disabling cicatrix resulting from extensive sloughing and protracted suppuration.

A fruitful source of misapprehension as to the effects of a gun-

shot wound upon animal tissues, is found in the fact, that a less degree of laceration is produced by a ball when moving with great velocity than when moving at a slower momentum. Hence, as Prof. Chisolm says, "the statement has been made and very generally accepted by Surgeons, that a missile moving with great rapidity when impinging upon and traversing a member, would cut the tissues so nicely as to stimulate an incision made by a sharp instrument; and, that the greater the velocity the greater the likelihood of making a wound that would heal without suppuration."

This, I submit, is a misapprehension of what really happens.—A blunt and edgeless body cannot be made to cleanly incise the flesh, no matter what degree of force and velocity be imparted to the implement in its passage through the tissues. Let me illustrate: If a ball from an ordinary muzzle-loading sporting rifle, strike fairly the head of a squirrel, a shattered, shapeless mass is all that is left of that portion of the animal, while the contour of the head is not destroyed by its being struck by a conical ball fired from one of the new fashioned breach-loading sporting rifles, such as Wesson's or Howard's. In the latter instance, there is only an aperture, drilled as it were, through the head, the general shape of which is in no other manner disfigured; but that tubular opening through the animal's head is not, as it were, cleanly cut with a sharp edged punch. The ball did not incise, but forced and tore its way through, and the opening, produced by its passage, is, sure enough, "walled in" by pulpified and impacted tissue.

Again, when a cannon ball, with impeded momentum strikes the body of a tree, the shaft is broken with much riving and shattering of the timber. On the contrary, a similar missile, with unimpeded velocity, will divide the shaft much more cleanly; still, the separated ends do not, at all, present the appearance of having been cut through; on the contrary, they are shaggy with the crushed and comminuted fibre of the wood.

I remember to have seen immense damage inflicted upon the soft tissues of the forearm by the passage of a minie ball with impeded velocity. The skin was burst asunder where the ball had not touched it, and there was extensive laceration with much protrusion and eversion of the muscles. Much less laceration will result

from the passage through these structures of a minie ball at full velocity. The missile will tear through much more readily, and leave behind a wound much less in extent, but, no more perhaps, even less, liable to heal by quick union. The Surgeon, upon introducing his "educated finger" into such a wound, does not find the walls of the aperture resembling a smoothly cut surface, but, on the contrary, he finds them lined as it were, with a sort of villous coat of crushed, pulpified, *killed* tissue, the villi inclining in the direction of the orifice of exit, and it is this lining of minced, disorganized, dead matter, that must melt away in suppuration, before the wound can heal by granulation.

Attached to one of my "Records of Surgical Cases," I find some "remarks" so pertinent to the subject now under consideration, that I can, with propriety, insert them here as part of this article. These remarks accompanied the report of a case of gun-shot wound, in which the ball passed through the soft parts in such a direction as to leave a track of very unusual length, and were as follows:

I remark upon this case of simple, uncomplicated gun-shot wound of the soft parts, for the reason, that it illustrated with clearness and certainty, the effects of a gun-shot wound upon the soft tissues, according to the *degree of force* with which the projectile impinges upon and passes through them. Surgical writers of distinction have taught, that in gun-shot injuries of the soft parts (other things being equal) the greater the velocity of the ball, the less the death of the tissues *along its track* and the more apt is the wound to heal without suppuration.

An increased interest has been imparted to this subject by the contrariety of opinions recently pronounced in a discussion of this point by the members of "The Association of Army and Navy Surgeons."

The case above referred to entered the hospital prior to the establishment of suppuration, and the following was the condition of the parts involved in the injury. The orifice of entrance, and of course the point at which the ball struck with greatest force, presented the following characteristic appearances: Commencing at the most central portion of the wound, there was exhibited for investigation,

the patulous and tubular opening, produced by the rapid and forcible passage of the ball before its momentum had been much impeded; surrounding and lining this tubular opening, could be clearly seen a well defined circle, consisting of that portion of the tissues, which had been contused, pulpified and impacted by the passage of the ball *against* them, and it was perfectly manifest, that the effect had been to completely deprive this area of tissue of all vitality; the fact being unmistakably exhibited by a well defined ring of whitish, indurated and insensible tissue, all of which was seen with perfect distinctness, for the reason, that the circle of dead matter had not commenced to break down and melt away in the suppurative process. Surrounding this ring of killed flesh, could be clearly traced a second circle, consisting of highly congested and inflamed tissue, which had escaped destruction from the passage of the ball, and from the surface of which, after the separation of the inner circle, sprung the granulations by which the wound ultimately healed. The tubular opening produced by the entrance and passage of the ball in the first part of its course, did not exist throughout the extent of the wound, but was, on the contrary, of conical shape, gradually growing more and more contracted, as the force of the ball decreased, until finally, its course was marked simply by a penetrating wound, without destructive contusion, and in which the parts, separated, but not impacted by the passage of the ball, again met in coaptation. This condition was most distinctly seen at the wound of exit, where the force of the ball was the weakest. Here, there was no patulous opening, there was no removal, nor impaction nor disorganizing contusion of the parts.—The ball, in its diminished velocity, had only penetrated the tissues without destroying their vitality, as it had done in the first part of its course. The parts at the wound of exit, were in that condition described as constituting the second circle surrounding the orifice of entrance; they remained in coaptation, readily agglutinated, and healed with little suppuration. So, that the orifice of exit, had healed, while that of entrance was still gaping and suppurating.—Precisely the opposite should have obtained, were the teachings above alluded to correct.

The phenomena, progress and results in this case, it appears to

me, conclusively establish the fallacy of that opinion, which holds, that in gun-shot wounds the greater the velocity of the ball, *cateris paribus*, the greater will be the probability of union by first intention. It appears to me, that this case (to say nothing of the common view of the subject) unquestionably demonstrates the fact, that where weight is equal, it is alone the force with which the projectile impinges upon and crushes through the tissues, that ensures their loss of vitality and justifies the axiom in Surgery, that gun-shot wounds can only heal by granulation, and that, therefore, it is incorrect to contend, that the greater the momentum of the ball, the less the contusion, pulpification and death of the tissues through which it plunges in its rapid, crushing, disorganizing course.

Before closing this inquiry as to the nature of gun-shot wounds, I will direct attention to one other point.

If there be, in such an injury any other complication, than that dependent upon true laceration and contusion, it exists in the simple attrition of tissue consequent upon the rapid friction of the ball against it. This wearing of tissue produced by contact with an object moving with great velocity, is generally, I believe, recognized as a burn, with which it is, indeed, almost identical in progress and results. I do not, however, consider, that it can properly be regarded as a burn, as it is not induced by heat. This position may be deemed erroneous and it may be claimed, that friction produces heat, and that this particular sort of injury is nothing more or less, than the result of a true burning process, still, I think, that the following instances will show, that such injuries are not, properly speaking, burns, and they will, at the same time, serve well to illustrate how a rifle ball, in full momentum, may produce molecular death by the mere attrition consequent upon its contact with living fibre.

CASE I.—A man was holding a young mule by a rope which passed between the index and middle fingers. The mule became suddenly frightened and made a single bound, thereby jerking the rope rapidly, but for a short distance, through the hand and fingers. The result was a most painful injury to the hand and one apparently identical with a burn of the same depth in progress and results.—Not more than a foot or two of the rope could have passed through the man's hand and, therefore, the friction was not sufficient to

have generated a temperature capable of searing the flesh by a mere momentary contact.

CASE II.—A passenger car in the rear of a moving train became disconnected. An impulsive individual sprang from his seat to jerk the bell rope and give notice to the engineer. For an instant only, his grasp was closed upon the cord and immediately relaxed, for that moment was sufficient for the infliction of a terrible abrasion by the swiftly sliding cord. All pronounced the poor man's hand "dreadfully burnt," but surely the friction was too momentary to have generated heat sufficient for the production of the injury inflicted upon that hand.

Similar cases could be multiplied, but the foregoing suffice to illustrate what I mean by mere attrition of tissue produced by contact with a swiftly moving object. I do not conceive, that such an injury can exactly be considered a laceration, a contusion or a burn, but I do know, that it is one which produces molecular death and can only heal by suppurative granulation. It is not difficult to conceive, that a rifle ball, in traversing the tissues, inflicts upon them this sort of injury, in addition to that produced by more direct and positive laceration and contusion.

ART. III.—ON THE INTERNAL ADMINISTRATION OF CHLOROFORM IN PERNICIOUS FEVER. By SAMPSON EAGON, M. D., Marshall, Texas.

The object of this brief paper is to present to the Profession, the clinical history of six cases of Pernicious Fever, in the treatment of which chloroform internally administered, was relied upon as the principal therapeutic means. These cases embrace in their number, one or more cases of the several recognized varieties of this disease, and are as follows:

1st, one of the cerebral variety; 2nd, three of the abdominal variety; 3d, one of the thoracic variety; 4th, one of the necreamal variety.

The first case, occurring in the vicinity of Opelousas, La., in the Fall of '61, the remainder occurring in the neighbourhood of this place, (Marshall, Texas,) during the last Summer and Autumn.—

Beginning, seriatim, with these cases, the first (cerebral) was of moderate severity, though possessing, in a well pronounced degree, all the distinctive features of the disease. The patient, a negro man, æt. about 25, with first paroxysm, was seen two hours after the accession of the chill, when chloroform f. ʒj. was administered, in double that quantity of glycerine, as an excipient; synapisms the meanwhile were applied to the lower extremities. The good effects of this dose were experienced in less than ten minutes, as indicated by the diminished frequency and augmented force of the heart's action, by returning warmth to the extremities, together with almost complete subsidence of delirium; in fifteen minutes the dose of chloroform was repeated, and in half an hour reäction was completely established. The patient was now put upon the liberal use of quinia, which was continued for four or five days; convalescence rapid; no recurrence.

The second case, (belonging to the abdominal variety) the subject, a young lady, æt. 17, was of much more gravity than that just detailed, the cold stage having existed for three hours with unabated violence, no efficient means having yet been resorted to for relief. Treatment, chloroform f. ʒj. in glycerine, every fifteen minutes till three drachms had been taken; active revulsion to the spine and extremities by means of synapisms and friction with hot oil of turpentine. Reäction was thus brought about in an hour, and the patient fell into a quiet slumber, from which she awoke in four or five hours, quite relieved. After treatment, quinia continued as in the other cases; no recurrence.

The second and third abdominal cases were so similar in their character, mode of treatment, and termination, as to admit of a common description. Both cases occurred in young adult males; were of great severity; were not seen by the physician for three or four hours after the commencement of the chill, which was continuing to deepen into collapse. In these cases there were frequent, though not copious, discharges of sero-sanguinolent matter. The patient, indeed, presented very much the aspect of one labouring under epidemic-cholera, in the stage of collapse. Treatment, chloroform f. ʒi. in glycerine. A favourable impression made upon the patients in fifteen minutes, remedy repeated, at this interval

till four drachms had been given. Revellents to the spine and extremities vigorously employed. Reäction complete in an hour and a half, favoured by slight febrile movement, which lasted for an hour or more, the patients, the meanwhile, falling into a quiet sleep, from which they awoke in six or eight hours relieved. After treatment, quinia, &c.; convalescence favourable; no recurrence of paroxysm.

The fifth case was thoracic, presenting the ordinary constitutional symptoms of this stadium of the disease (cold stage,) superadded to which was, laborious oppression of the respiratory organs, as shown by the much accelerated and difficult respiration. This variety of the disease is justly regarded as second only in gravity of import, to the almost necessarily fatal necreamial variety.—Chill had lasted three hours before treatment was begun. Treatment the same as employed in the preceding cases, with like effects; convalescence protracted. After treatment, quinia, &c.; no recurrence.

The sixth and last case (necrcamial) was one of overwhelming severity, the nervous system seeming to have been almost paralyzed, whilst its dependencies seemed to suffer in like degree, from the poisonous effects of the malarial principle. The blood, indeed, upon which every organ and tissue of the body is dependent for its vital activity, seemed to be so changed and vitiated in quality, as to no longer afford appropriate material for nutrition. The subject in this case was a German, æt. about 30, of a well-developed and originally vigorous frame, but at the time of attack, much reduced in strength from the protracted intemperate use of alcoholic beverages. Patient seen not until twelve hours had elapsed from the supervention of chill. Treatment, the same as in the preceding cases, with the exception that the remedy was given rather more liberally, and persevered in for a longer period. No impression favourable or otherwise seemed to be produced by chloroform, or any of the various remedies resorted to in the case.—The patient died in six hours from the time I first saw him.

In treating of this affection, I have preferred to employ the classification adopted for the practical reason, that whilst the disease is essentially the same in all of its various forms, requiring the same general mode of management, yet in reference to the diagnosis,

it is important to bear in mind its several varieties, when there will be generally little difficulty in referring each particular case to the class to which it belongs.

My attention was first directed to chloroform administered internally, in 1860, by the eulogies pronounced upon its virtues in three cases, by the late Prof. E. D. Fenner, of New Orleans, who had prior to that period employed it with very gratifying results in several cases, as well as in the cold stage of ordinary intermittents, with like results. Dr. F. remarked on this occasion, that, "from the very prompt and happy effects experienced in the limited number of cases, in which I have seen the remedy exhibited, I am inclined to regard chloroform, internally administered, in the dose of from half a drachm to a drachm, repeated at the interval of fifteen or twenty minutes, as possessing more potency than any other article of the materia medica, in bringing about reäction from the frightful collapse of congestive fever. Having resided and practiced my Profession since '60, in a highly malarial district, an ample opportunity has presented itself, which has been embraced, of putting to the test Dr. F.'s assertion as to the virtue of chloroform in relieving a paroxysm of intermittent fever in the cold stage, and I am happy to be able to add, that in doing so I have had occasion, in more instances than one, to feel gratefully thankful to this distinguished gentleman for his valuable suggestion. Several articles have recently appeared in the different Medical Journals of this Country, each bearing testimony to the value of chloroform in ordinary intermittents, given in the first stage. My own experience accords well with the views expressed in those articles. I regard the diseases, (as I believe most Southern Physicions do), pernicious and intermittent fever, as differing in degree only, and not in kind. The treatment of both, therefore, is rationally conducted upon the same general principles.

As to the modus operandi of chloroform in relieving the cold stage of intermittent fever, I have seen no explanation. The most plausible hypothesis of its mode of action it seems to me is, that a powerfully stimulating impression is produced upon the stomach by immediate contact of the remedy, which impression is rapidly conveyed chiefly through the medium of the nervous system to the

capillaries, exciting, in this system of vessels, remote sympathy. As to the prophylactic, or antiperiodic power of chloroform in intermittent fever, I am inclined to think it possesses no greater virtue in this way, than is common to all narcotics.

ECLECTIC DEPARTMENT.

"Floriferis ut Apes in Saltibus Omnia Limant."—LUCRET.

I.—ON NIGHTMARE OF CHILDREN. By SYDNEY RINGER, M. D., Professor of Materia Medica and Therapeutics at University College; Physician to University College Hospital, Assistant to the Hospital for Sick Children, Great Ormond street.

SCREAMING OF CHILDREN.

Violent screaming, which cannot be quieted, and which may last for a few minutes to several hours, is frequently witnessed in children. This is generally produced by one of three causes—hunger, pain, or nightmare. These remarks treat of screaming from the last cause.

The following account gives a fair example of a case of this kind:

Charles L., 2 years old, came under my care at the outpatient department of the Children's Hospital. The child was badly nourished, and was afflicted with a frequent hacking cough, that troubled him much more at night than day. For two months he had, twice or three times each night, started from his sleep, screaming violently. Each paroxysm of screaming lasted about half an hour. Sometimes he rolled about the bed, threw his arms wildly about, and knocked his head violently against the bed; on other occasions he sat up in the bed and screamed so violently that he became black in the face. While thus afflicted his eyes rolled, and he appeared to be quite unconscious, as he did not recognize his mother, and could not be brought to by her care and attention. His mother stated he did not appear to have his senses. He gave no signs of being in pain. He did not talk, he only screamed violently. After each paroxysm he fell asleep, but his sleep was disturbed, and his eyes still rolled, and he frequently moaned. His gums were neither red nor swollen. His appetite was good, but his bowels had been relaxed for three weeks, and his motions were green and slimy, but no worms were ever seen in them. He was fed judiciously. He wetted the bed at night. During the fortnight that preceded his application for relief at the Hospital, he had suffered from two convulsive fits, when his arms worked and his face twitched. Each of these fits lasted twenty minutes.

This case may be excepted as a very fair example of the screaming of which we are now speaking.

Such screaming may occur in children of all ages; but, while it is met with in children of 10 or 12 years of age, it is of more common occurrence in those of a few months to 2 or 3 years old.

These attacks may last a very variable time, for though the paroxysm may pass away in a few minutes, it sometimes continues for half an hour to one or even two hours. During this time the screaming is violent and continuous. Sometimes the children appear to be asleep throughout the paroxysm, while other children wake from their sleep, but continue to scream with unabated violence; but even when awake they often appear to be unconscious of what occurs around them.—They seem to be, as their mothers state, "out of their senses;" thus they for the most part cannot be quieted. Others appear to wake thoroughly, and are then terribly frightened, and often tremble all over. Such children can generally be quieted in a short time by kindness and attention paid to them, but they remain for some time much agitated, and refuse to be left alone, or, if removed from their bed, they are afraid to return to it. Some children cry only a little, but they wake up frightened and trembling.

Such screaming may continue to occur for months and even years, sometimes disappearing for a time, and then, from various causes to be immediately mentioned, it returns again. It is often repeated several times each night for several months.

Such attacks are naturally a source of much annoyance and much anxiety to the parents, and thus medical men are not unfrequently consulted for this affection. The screaming may be so violent that the child becomes "black and blue" in the face, and occasionally it even terminates in a general convulsion. This, however, is unusual, and in my experience occurs only in children who suffer from convulsions without screaming and from other causes. Such paroxysms of screaming sometimes recur only with long intervals. The child may have one attack but this may not be repeated for some weeks, or even some months. On the other hand, they may recur ten or twelve times a night.

This screaming differs from delirium, as it does not occur in those diseases accompanied by delirium. Moreover, there is no incoherent talking or muttering, while some children can be roused from this state and are then perfectly rational, although greatly frightened; it occurs only during sleep. The mothers often call it nightmare.

The children, the subjects of this affection, are very generally pale, often ill-nourished, and out of health. The immediate cause of this screaming appears to be some disturbance of the stomach and intestines. The nature of this affection of the intestinal canal may be very various in different cases, for one child may suffer from constipation while another is troubled with diarrhœa. This disturbance is very generally dependent on food ill-suited to young children; for this irregularity of the bowels, and the screaming which accompanies it, are especially frequent in those children who have been brought up by hand, and who,

consequently, suffer on the one hand from diarrhœa, on the other from constipation. Children thus reared suffer, as is well known, very generally from constipation, and pass hard pale lumpy motions, something like marbles. These masses may consist of fæces; they are often composed of coagulated undigested milk, of a yellowish or greenish-yellow colour outside, but are white and cheesy within, looking like, and, indeed, being composed of curds of milk. (It may be here mentioned, in passing, that not uncommonly children pass by the bowels, or sometimes vomit, large masses of the same composition. These are generally two or four inches long, and about an inch in diameter. They often excite much wonder and anxiety on the part of the mother. When broken, the white curdy appearance at once declares their nature.) Children who suffer from the affection now under consideration are sometimes infested by thread worms, and also show signs of the altered condition of the mucous membrane of the stomach and intestines, by itching, heat, and dryness of the inner part of the nose, with itching at the anus. This screaming is increased by anything that interferes with the general health of the child. Thus, it is observed to be worse when the teeth are making their way through the gums, although the irritation and pain which arise from teething appear to be incapable of themselves of exciting this screaming. It is also made worse by slight attacks of catarrh of the lungs, or eruptions on the body. By treatment this screaming can usually be at once arrested. Both general and local treatment are in most cases required, the former to improve the general health, the latter to remove the conditions immediately exciting the screaming.

The diet should be attended to, and any irregularity in the hours at which food is given to the child, or any unsuitability in the nature of the food, must be remedied. Attention to these points will very generally arrest any diarrhœa which may be present, but constipation with hard shotty motions will generally prove more obstinate, for such motions are almost invariably passed by young children under six months old when brought up by hand, and this although they may be correctly fed and take nothing but good cow's milk sufficiently diluted with water. We have seen that these hard, round, lumpy motions are partly composed of coagulated undigested milk. This coagulation in mass can sometimes be stayed by the addition to the milk of alkalies such as limewater or bicarbonate of soda. The latter is preferable for this purpose, as limewater confines the bowels, and thus bicarbonate of soda should be preferred.

If the bowels are confined, an active purgative will, in the great majority of cases, suffice to stay the screaming, and will insure to the child calm and refreshing sleep. A powder of rhubarb and soda repeated every night, or every other night till three powders have been given, is useful. If the child be pale, and the constipation recurs and is obstinate, the following prescription will be found very advantageous—namely: Steel wine, to which is added a few drops of tincture of rhubarb, in quantities adapted to the age of the child and to the obstinacy of the constipation. Usually six drops of tincture of

rhubarb in a teaspoonfull of steel wine given three times a day will open freely and comfortably the bowels of a child from six to nine months old.

In order to effect a permanent cure it is often necessary to give medicines to improve the general health of the child, as these children are frequently pale and badly nourished.

Thus, in children suffering from the affection we have just described, to effect a permanent cure, if the general health be bad, treatment must be directed to the restoration of the body to sound health. In these cases iron, cod-liver oil, with cold sponging, prove most useful. Of the various preparations of iron, the tincture of the sesquichloride, in my experience, is decidedly the best.

It has appeared to me that bromide of potassium is able to stay this screaming, but as its administration has been accompanied by the use of purgatives, or a regulated diet, it is difficult to determine how far the bromide was useful. It is, however, I feel sure, worthy of a trial in obstinate cases. Cold baths must be given with care; for while they may, if properly administered, do much good, if administered without certain precautions, they will do great harm to children. If too great a shock be given to the child, depression of the system will be produced, and this may last even several days after the bath is administered, when the child may be languid and depressed, and may suffer from much chilliness with loss of appetite. Thus the amount of shock produced by the bath must be regulated to the age and strength of the child. In cold sponging of the body the shock caused is proportioned to the coldness of the water and the length of time the bath is continued; while the younger the child, or the weaker its health, the less able it is to bear up against the effect of the shock to which it is exposed. Hence with young children, and especially with those whose system is depressed, the bath should be continued only for a short time, and if the weather be cold, the water must be slightly warmed. When the child is weak, the bath should be continued at first for a few seconds only, and its duration be gradually increased as the child becomes accustomed to its use.

If the following simple plan be adopted, the child, even if very weak, can take the cold bath with advantage, and all chance of depression is removed. The child should be placed before a good fire, with its feet in warm water, while the cold water is freely poured over every part of the body except the head and face. The healthy reaction, with the agreeable sensations which follow the use of the bath, may be much increased by placing the child for a short time in the warm bed from which it had just previously been removed. The bath should be given immediately the child leaves its bed, and the breakfast soon after the sponging is completed.—*Quarterly Jour. of Psychological Medicine.*

II.—NOTES OF OBSERVATIONS ON THE CHARACTER OF THE RED BLOOD CORPUSCLE. By Professor RUFUS KING BROWNE, M. D.

There can be no doubt that it is a valid instinct in man, which has always assigned a commanding, if not supreme importance, in the complex processes of physiology, to the blood, and especially its red corpuscles. I have myself long been persuaded that all of the variations in these complex processes, which on the one side constitute health, and on the other disease—which two are only *divided* aspects of one and the same system, series, or sum of the animal functions,—will eventually be found to turn upon some change at a given time and under peculiar conditions, in either the rate of its progress, or the character of its main elements.

Accordingly, I have during several years sought on many occasions, to ascertain the true anatomical characters and then deduce the career, of the red blood corpuscle.

It is to this latter point that I propose briefly to ask attention, conscious that my observations, even with the highest known powers of the microscope, though repeatedly made very many times, have not as yet enabled me to affirm anything with entire certainty, yet I shall venture briefly to present the results of those observations.

The red blood corpuscle is regarded as an enduring anatomical element, but I am confident that they are the least so of any anatomical form in the body. I am confident, though as a *demonstration* my observations would fail to establish that conviction in the minds of others, that they are perpetually solved in the liquid sanguinis, and as constantly renewed.

This view is of course equally opposed to the notion on the one hand that they are permanent anatomical forms, and on the other, that they are "destroyed" in any special organ of the body.

The first striking feature of continued observation of these bodies, with *high* powers of the microscope, and without crushing them under the pressure of a covering glass, is that the *size* of each one of any given number of them varies between wide extremes, some being from three to four times the size of others. This great disparity is of course not sufficiently palpable to arrest the attention of the observer except under very high powers.

The opinion generally received is that the human red blood corpuscle is either a cell with red contents, the nucleus of which has disappeared, or that it is a free nucleus of a cell, and which, is not settled.

Neither of these views appear to me to accord with the result of careful observations. It consists of matter of different degrees of density in different parts, being much more nearly fluid in the interior than the outside. To this fact is attributable the depressed centre, which is not however equally visible in all red copuscles. It has been most generally described as having a cell-wall, after the fixed stereodox form of designation of all such minute anatomical forms; and this long after the old and erroneous notion of a cell as a body having a

triplex structure, in three distinct parts, as cell "wall," "nucleus," and "nucleolus" has been abandoned by the higher order of observers with the microscope.

When placed in some liquids, many of the corpuscles swell up and disappear, but in such cases I have never been able to detect any remaining cell substance.

Dr. Beale has shown conclusively that the existence of this cell-wall must be abandoned as rather a theoretical notion than an ascertained or observed fact, although many observers have asserted the bursting of the corpuscle and the escape of its contents. Guinea pig's blood crystalizes very rapidly in tetahedral crystals, and if the process be carefully watched in a drop of blood which has been treated with a very little water, (and sometimes without the water,) certain corpuscles will be seen to become angular, and four or eight prominent angles will be apparent, while others will exhibit the well-known stellate appearance. Afterward, the entire blood corpuscle will be seen to crystalize, and subsequently the crystals will be seen to coalesce and form larger crystals. Certainly no membrane nor anything resembling it exists here.

The red blood corpuscle from the same animal differs in character considerable. Some are darker and harder than others; some are so transparent as to be nearly, if not totally, invisible, and some are not more than one-fourth the size of others. These facts, which appear to have escaped the attention of observers, are only applicable to the supposition that different corpuscles are in different stages of *growth* and progress.

Experiments with colouring matter strongly confirm this conclusion. The white corpuscles of the blood can be very readily tinged with a solution of carmine and glycerine. The granular or nucleated corpuscle of the embyro is also easily colored, while the majority of the red corpuscles cannot be colored by the same means. Nevertheless, in certain instances, some of the smaller corpuscles in the capillaries can be readily colored. These, however, are very much smaller than the white corpuscles, and do not present their granular appearance. *They are undoubtedly young red corpuscles.* There are, however, other observed facts which can lead to no other conclusion.

In Winter, the capillaries of the common frog contain numerous oval corpuscles, not more than half the dimensions of the corpuscle when the same animal is active. In this case at least there can be no doubt of the fact that the former are *young* corpuscles. In the lymph canal, there may always be seen in the intervals of digestion small corpuscles of a similar character, and these may also readily be stained.

These observations lead me to the conclusion that the red blood corpuscle is either the separate form of the aggregations of rounded particles, apparently granular, forming the white corpuscle, or of the corpusles I have designated found in the lymph canals, and that it undergoes a series of changes, by which it finally becomes converted into matter soluble in the plasma, and that they are thus continually dissolved and replaced.—*American Journal of Dental Science.*

III.—ATOMIZING INSTRUMENTS. By BENJAMEN DURHAM, JR., M.D., late Surgeon and Brevet Lieutenant-Colonel, U. S. Vols.

In the Medical Profession there is a constant endeavour to apply remedial agents as directly to the diseased tissue as may be practicable, and in diseases of the throat and lungs, especially, inhalation, in some form, has long been practiced. An attempt has been made to introduce insufflation of dry powders, but practitioners have preferred to administer healing agents in the form of vapour, and inventive minds have brought forward apparatus to nebulize, atomize, or mechanically divide fluids into fine vapour. In 1858, Girons formed a spray by forcing liquids against a metallic plate, but soon after, Dr. Bergson, of Berlin, constructed an apparatus which is now generally used in the different patterns of atomizing instruments. Bergson's tubes are very simply formed, consisting of two cylinders, each drawn down to a capillary aperture at one end, and so placed at right angles to each other that the point of the perpendicular tube shall cover the lower half of the orifice of the horizontal tube. These can be made by any one, from glass julep tubes, and are often used by druggists in forming an aromatic spray, since, when arranged as above, and a current is driven through the horizontal tube, the air in the perpendicular tube is exhausted by suction, and if the lower extremity has been placed in any fluid, it will be drawn to the capillary orifice and there minutely divided by the cross-current, as a strong gust of wind will break into a fine spray the water falling from the conductor at the corner of a building. In order to produce a spray in internal cavities, as at the mouth of the uterus, the tubes have been so constructed as to be parallel with one another, and then one is bent at the capillary extremity into the proper relation to the other. Dr. W. B. Richardson's nebulizer is more complicated in its construction, but Bergson's tubes answer every practical purpose.

Having these tubes as the foundation of all atomizers, we find many mechanical appliances for furnishing the nebulizing current. The first and most simple is the breath of the operator, and the next is an India-rubber ball perforated at the base, so as to allow the entrance of air as soon as it is emptied. But in these cases, the vapour will be formed intermittingly, and the instrument now most commonly used is a rubber tube, terminating in two hollow balls placed at a short distance from one another; the lower being the hand-ball, which is used as in the common self-injecting syringes, and the upper one, (of thinner rubber, and covered with thinner netting to prevent undue distension,) being the regulator of the spray-producing current. This is an effective and simple instrument, but it has the disadvantage of so tiring the patient that generally it will be injurious for him to use it, or he will neglect the application of remedies on account of the consequent fatigue. And whenever the operator makes the applications himself, he soon finds the repeated closing of the hand very wearisome, and he wishes for some agent to produce the current necessary to form the spray, Dr. Siegle,

of Stuttgart, constructed an instrument, in which steam was used in vaporizing, instead of air. In this country, similar apparatuses, with some modifications, have been manufactured by instrument-makers, but those of Codman and Shurtleff seem to be the most popular. In their machine, a sheet-iron stand supports a copper boiler, provided with a spring safety-valve and with an opening surrounded with rubber packing, through which a Bergson's tube is introduced, the other arm of the tube dipping into a cup containing the medicated fluid. After partially filling the boiler with water, steam is raised by the use of an alcohol lamp, and the current passing through the horizontal tube creates the vacuum, draws up the fluid, and forms the spray without inconvenience to the invalid, and, when once the instrument is well arranged, without the constant supervision of the physician. To prevent the vapour from reaching the patient's face and clothes, a movable stand is provided with a face-shield, or glass funnel, which prevents the scattering of the spray and conducts it to the mouth, or, by attaching a flexible tube to the nose. Some of the steam will be condensed, and a cup receives the drippings from the large end of the funnel. Such an instrument costs twelve dollars, but a physician with some mechanical talent can provide himself with a less finished instrument at small expense.

Having described the mechanical appliances for atomizing the question arises, what is the range of application and the value of this agency in the treatment of disease? The literature upon this subject has been limited to a few articles scattered through our Medical Journals, but this Spring they announce the publication in London of "Inhalation as a means of local treatment of the organs of respiration by atomized fluids and gases," by Dr. Hermann Beigel, and in Philadelphia, a similar work by Dr. J. M. DaCosta, while a report on the "Therapeutics of Inhalation," is expected from Dr. J. S. Cohen at the next meeting of the American Medical Association.

We readily perceive the special application of inhalation of atomized fluids to diseases of the mouth and air-passages, yet we cannot rely on it in the treatment of these affections, but simply accept it as a valuable adjuvant to our therapeutic means. During high inflammatory action in the larynx or lungs caution must be used in the inhalation of remedies, and mucilaginous or narcotic substances should be employed, for it is doubtful whether any benefit is experienced except the relief of the distress and coughing. It has been fully proved that the spray reaches the smaller tubes of the lungs when deeply breathed, and therefore the respiration should be quite superficial in diseases of the pharynx, but full and slow when it is desirable to reach the extreme parts of the lungs. The greatest benefit is found in treating the diseases of the pharyngeal cavity, because the remedies can be applied more directly and in greater quantity; but we will feel great satisfaction in the use of atomized fluids in chronic catarrhal affections of the larynx and in chronic bronchitis, and the putrid odor which sometimes accompanies the expectoration can be counteracted by the inhalation of astringents or balsams. In the early stages of phthisis it will be found of advantage in limiting the cough, dyspnœa, and expectoration, but all observers

unite in affirming it will not stay the progress of the malady. In pulmonary hæmorrhage, whether tubercular or not, it proves to be a decided increase to the forces previously at command, and if atomization were only valuable for applying styptics directly or near to the bleeding points, it should not be neglected. In nasal catarrh, by means of the tube affixed to the face-shield, the upper portion of the nose may be reached without the pain consequent on the use of injection, and patients breathe more freely, so that experiencing less distress, they say the nose seems "cleared out."

In addition to this internal use of the atomized spray, it has been found advantageous in external applications to the eye, chronic ulcers, etc., and Cohen advocates its employment when it is desirable delicately and carefully to cauterize a diseased surface.

In regard to the medicaments that may be used with the atomizing instruments, we may mention, first, the vapour of water, either cool or hot, then any limpid effusion or decoction may be poured into the boiler instead of water, thus imparting to the current of steam remedial power, while any clear solution or fluid may be placed in the medicine cup, for, in practice, the articles of the materia medica which are changed in appearance by mingling with aqueous vapour seem to have the same therapeutic value as when unaltered, though, we must, in the use of infusions, choose such as will not prove incompatible with the remedy which is atomized. When it is desirable, we can graduate the amount of fluid which may be atomized in any given time, by selecting Bergson's tubes with capillary orifices of the desired calibre, and it is well to have them of three sizes. But, it must be remembered, although only a limited per centum of the nebulized fluid passes into the lungs, yet absorption from the air-passages is very rapid, and we must use caution that too large a quantity of the remedy is not used by our patient.

The following remedies have been used with benefit in the atomizing instruments, *viz.*:—nitrate of silver, tincture of opium, morphine, atropine, extracts of hyoscyamus, belladonna, and conium, tannin, alum, acetate of lead, sulphate of zinc, iodine, bromine salts, permanganate of potash, bichloride of mercury, and *even* cod-liver oil. The sesquichloride and persulphate of iron prove invaluable styptics in hæmorrhages, while some cases of asthma have been relieved by the arsenite of potash; Dr. Beigel introduced the use of the nitrate of aluminum in nervous affections of the trachea and larynx, and recommends limewater as a solvent of the diphtheritic membranes; glycerine is very soothing to the irritated air-passages, and destroys the fetor of some pharngeal diseases; while chloride of sodium, at first theoretically employed to produce an artificial sea air, has proved to be beneficial in all stages of phthisis.

In conclusion, a few ordinary cases are appended as instances of the application of atomization. My first use of the steam atomizing instrument was personally, for severe inflammation of the left tonsil and side of the tongue. Aug. 26, 1866, the disease was fully developed, the jaw was firmly closed, and no application could be made topically. I

resorted to atomization of a solution of tannin, seven grains to the ounce, and immediately experienced relief from pain and constrained breathing. The usual treatment by poulticing, inhaling vapour of hot vinegar, etc., would not relieve the distress, but sleep quickly followed the use of the steam-machine until the night of September 2d, when even atomization ceased to check the pain. The next morning, a large abscess burst, and no farther medication was required.

II.—M. A. applied Oct. 18th, 1866, for advice concerning ozæna, which had been treated many months by various physicians, without benefit. After inhaling, through the nostril, a solution of iodine (two grains to the ounce,) he expressed himself as relieved. After the previous use of injections he had experienced considerable suffering, but now he breathed freely, without pain. While under treatment he was benefited, but he was unwilling to take from his business the necessary time and attention to effect a cure.

III.—L. M. applied Dec. 17th, 1866, for medicine for an annoying hacking cough, which had troubled her for two days. I found she had a slight attack of bronchitis, and prescribed the inhalation of a solution of morphine, one grain to the ounce. The next day she reported she had inhaled the medicine several times with marked relief, and needed no further medication.

IV.—L. M. again applied February 19th, for a repetition of the same treatment which had previously benefited her. She had taken a hard cold, and was troubled with severe pharyngitis. I prescribed the inhalation of the solution of morphine, the next day employed a solution of tannin (eight grains to the ounce,) and on the third found her convalescent and ready to acknowledge the comfort in using the inhalation.

V.—J. D. was attacked with tonsillitis, April, 4th, and used gargles of capsicum and whisky, vinegar, etc., without relief. I was called April 5th, and found him suffering pain, and very uneasy at his confinement. I prescribed the inhalation of the solution of tannin. As soon as he had once used the atomizing instrument, he expressed his opinion that it would help him, and promised to make repeated applications that day and night. The next morning he was better, and discharged himself going to his store and transacting his usual busines.—*Chicago Medical Journal.*

IV.—DEEP CERVICAL TUMOUR, the removal of which involved the exsection of a portion of the internal Jugular Vein, with some remarks upon the Ligation of Veins in General. By WILLIAM WARREN GREENE, M. D., Professor of Surgery in Berkshire Medical College, and in the Medical School of Maine.

On the 6th of April, 1864, Mr. Saunders, of Cheshire, consulted me with regard to a tumour upon the left side of the neck which he first

noticed three years before. It had slowly and regularly increased in size, and for three months previous had been the seat of almost constant pain, while the whole side of the neck and head had been affected with a neuralgia sufficiently severe to deprive him, in a great measure, of sleep. For the past few weeks his appetite, flesh, and strength had failed, and he was very much depressed. The growth was partially covered by the sterno-mastoid muscle anterior, to which it was quite prominent. It was regular in outline, fluctuating, but tense and somewhat tender. It was *apparently* quite movable, and seemed about the size of a croquet ball.

The patient, understanding the liabilities, having elected an operation, was etherized; and with the assistance of Drs. Smith and Paddock it was performed as follows: The shoulders being elevated upon a block of wood, the head, falling backwards a little, was turned to the right so as to render the coverings as tense as possible, and an incision made through the skin and superficial fascia, commencing just behind the angle of the jaw, and extending over the most prominent part of the tumour downwards nearly to the clavicle. The deep fascia was divided upon a director, and the cyst readily exposed. Its walls varied in thickness at different points, and were so thin at the apex as to burst under the pressure of the fingers. The opening was immediately closed with broad-bladed forceps, and there was not sufficient collapse of the tumour to embarrass the dissection. As this was carried down towards the base, the small veins in its vicinity were found very much enlarged and tortuous. Three of these were tied. Around the lower portion of the cyst there had been plastic inflammation sufficient to blend its surface intimately with the sheath of the vessels, upon opening which the carotid and its accompanying nerves were found free, but the vein was so closely adherent to that part of the sheath blended with the sac, that it was impossible to separate it. So firm was the union that (the venous coats being evidently softened by the inflammatory process) in the very careful attempts to liberate it with the finger and the handle of the scalpel, the vessel ruptured, and there was a most alarming gush of venous blood. This was instantly controlled by pressure, and but little time was lost in applying a ligature to the cardiac side. Being now secure against the entrance of air, sufficient pressure was made by the fingers of an assistant, on the distal side, to control the hæmorrhage, the opening in the sheath extended, and the vein carefully isolated from the accompanying artery and nerves to a point above its attachment to the tumour where it was tied, and divided just below the ligature as it was also just above the first point of ligation. The portion thus exsected was two and a half inches in length. The dissection was carefully continued down to the transverse process of the third cervical vertebra, to which the pedicle was firmly attached. Around this a smooth, well waxed, hempen twine was tied, the tumour separated with the knife, and removed from its bed. But one artery was tied, and that a very small one. After all oozing had ceased and the parts were somewhat glazed, the flaps were united by interrupted silver sutures, the ligature emerging from the lower angle of the incision. Reaction

came on slowly, but in eight hours was well established. For four days he had considerable fever, and complained much of headache and giddiness. Was delirious occasionally. On the fifth day the fever abated, and from this date he slowly but steadily improved. The greater portion of the wound united by first intention. There was considerable purulent discharge, but of a laudable character. The ligature around the pedicle came away on the 19th day, the others having separated previously. On the 28th day after the operation he was able to walk to my office, and the next to ride home in the cars, a distance of ten miles. At this time the wound was entirely healed, and he only complained of some stiffness of the neck and of a strange feeling in that side of the head. These symptoms passed away in a few weeks, and he is now a stout, healthy man, able to carry on his business as a farmer with as much ease as ever.

Immediately after the operation, he commenced taking tr. ferri. muriat. half-drachm, every four hours, which he continued all the time that he was under my observation, combining it with quinia after the surgical fever had passed. While this was active he got a saline cathartic preceded by a mercurial, veratrum sufficient to control the heart's action, Dover's powder q. s. to procure rest; cool effervescing draughts, etc. Beef-tea and gruel for the first five days, after which he was allowed milk, steak, chicken, and eggs, in moderate quantities.

In common, I suppose, with all my professional brethren, I was taught when a student, both by preceptor, professors, and the text-books, that the ligation of veins was a most hazardous procedure; and so emphatic and oft-repeated were the warnings given that I became thoroughly impressed with the idea that so great was the danger of pyæmia as the result of any such interference, that it was only justifiable in cases of extreme emergency, and for several years my practice was in conformity with this doctrine.

Of course when we ligate any vessel we desire and expect a certain amount of inflammation, being only anxious that it shall be of a character consistent with the exudation and complete organization of plastic material. In various conditions of impaired nutrition, and especially in toxæmia, we may fail to secure this result and have instead a purulent, or, what is much worse, an ichorous exudation, which, if it finds its way into the general circulation, seriously aggravates the toxæmic condition; but I doubt very much whether any valid reason can be given why this unfortunate form of inflammation *should* attack a ligated vein rather than a ligated artery, or whether a candid review of the experience of the profession would establish this *as the fact.*—*If such inflammation occurs*, then the ichorous pus is much more likely to reach the general circulation and produce its deleterious results, if formed within a vein than if formed within an artery. For in the first it mingles with the enlarging stream, and flows inwards without obstruction until it reaches the portal or pulmonary capillaries, whereas the current in the arteries is forcibly towards the surface; and thus we are more likely to have superficial abscesses as the result of arteritis, and visceral as the result of phlebitis; but that this form of

inflammation is more likely to *occur* in veins than in arteries I very much question. I do not believe that *ligation* adds to the danger of pyæmia in the case of a *wounded* vein, or that any other than plastic inflammation follows in a healthy condition of the blood; always presuming, of course, that no poison has been communicated to the wound during the operation. In septic states of the blood all operations are dangerous, and those upon the veins especially, as for the reason above stated, but in case of a wounded vein I do not believe that the *ligature* adds to the danger in any condition of the system.

My opinions upon this subject have not been formed without much thought and observation. I have now ligated the internal jugular four times. Once in a case of attempted suicide, once in case of a deep seated cervical tumour removed before the class of 1866, in the Medical School of Maine, again in the removal of a bronchocele last summer, which case was reported in this Journal, and in the case of exsection here recorded. In none of these were there any untoward results. I have ligated the femoral vein after amputations of the thigh in six instances. Four made good recoveries, and two died within a few hours after the operation. I have once ligated the axillary vein in a shoulder-joint amputation with good recovery. I have repeated the same procedure upon the anterior and posterior tibial veins with no ill effects. In many ligations made for varicosities of the saphenous and spermatic veins, for the cure of hæmorrhoidal tumours, "aneurism by anastomosis," etc., I have never seen any of the results of which I stood in so much fear years ago. If I have been more fortunate in my cases than some others, my experience is not so exceptional as to fail in demonstrating, at least to my own mind, the comparative safety of the operation. I am confident that in several instances by thus saving a small amount of blood, I have turned the trembling scale in favour of the anæmic patient. I am equally confident, too, that years ago I lost patients that might have been saved, simply from reluctance to "tie veins." Frequently have I seen excellent surgeons, after an amputation, tie every bleeding artery with all haste, and hesitate to arrest by the same means the fatal loss of a few drachms or ounces because it came from a vein. I have no doubt that many lives were thus sacrificed during the late war.—*Medical Record.*

CLINICAL RECORDS.

"Ex Principiis, nascitur probabilitas: ex factis, vero veritas."

PATHOLOGICAL NOTES. By SAMUEL C. CHEW, M. D., Professor of Materia Medica and Therapeutics in the University of Maryland.

Case of Phthisis with Bellows Murmur under the Right Scapula.

I have deemed it proper to report the following case, because it

presented a very striking auscultatory phenomenon, the cause of which it was impossible to define with precision during life, but which was entirely elucidated by an examination after death.

I. O., a sailor, 31 years of age, entered the Hospital of the University of Maryland, June 6th, 1867, suffering with loss of appetite, hoarseness and cough, which had existed, as he stated, for two months. Upon making an examination of the chest, some degree of dullness was found beneath the right clavicle, with abnormal harshness of respiration and prolonged expiratory sound, signs which pointed to a tubercular deposit at the apex of the right lung. Respiration in the left lung appeared at this time to be normal, and the percussion sound was clear.

A soft murmur was heard with the first sound of the heart, amounting to a slight prolongation of that sound, and conducted towards the base of the organ.

It was evidently aortic in origin, and dependent either upon anæmia, or upon slight thickening about the aortic valves or orifice.

But the most interesting point in the case, was the existence of a harsh bellows murmur, synchronously with the last, over the posterior surface of the right side of the thorax, the maximum intensity of which was near the inferior angle of the right scapula. Various conjectures were made, from time to time, as to whether this murmur was identical in origin with that heard in front, and was caused by conduction of sound through a solidified portion of lung; or whether it was due to atheromatous deposits in the walls of a pulmonary vessel. But its situation and harsh character rendered it probable that it was not a continuation or exaggeration of the aortic sound, but was distinct in origin.

It was impossible, however, during the life of the patient, to arrive at a positive conclusion in regard to the condition on which it depended.

But the uncertainty was removed by his death, which took place from an intercurrent pneumonia that rapidly involved the whole of the left lung, and was caused by tubercular infiltration, extending through every portion of the organ.

The right lung was likewise studded with tubercular matter,

especially throughout the upper part, and this had given rise to the dull percussion sound and the harsh respiration at that point.

On examining the deeper portion of the lung, two hard masses were found, each about the size of a hickory-nut, consisting of the calcareous residuum of tubercle, the organic portion of which had been removed by absorption. They were composed in large part of carbonate of lime, effervescing actively when touched with hydrochline acid.

These masses were much larger than such as are ordinarily met with, and they were pressing directly upon a branch of the right pulmonary artery, thus offering an impediment to the free passage of blood, and accounting for the blowing murmur heard with each systole of the ventricles.

One of the semilunar valves of the aorta was somewhat thickened and irregular along its free border, giving rise to the slight murmur heard over the cardiac region, which was thus shown to be different in origin from that heard at the back of the chest.

The case was an interesting one, from the remarkable character of one of its physical signs; from the impossibility of diagnosticating the cause of this with certainty during life; and from the perfect explanation afforded by the post-mortem examination.

Case of Yellow Fever: Death: Autopsy.—C. J., a sailor, 30 years old, entered the hospital on Tuesday, July 16th, suffering with high febrile excitement, violent headache, constant vomiting and some degree of tenderness at the epigastrium.

I saw him first on the following morning, when the whole surface of the body, with the conjunctival, presented a yellowish tinge, together with a red suffusion caused by capillary congestion. At this time the febrile heat had subsided; the pulse was weak and about seventy-five in a minute; the vomiting and headache still continued. The vomited matter was whitish in appearance, and seemed to consist only of milk which the patient had taken.

Mustard plasters were directed to be applied to the back of the neck, and to the stomach; small doses of morphia and hydrocyanic acid were given, which had the effect of lessening the vomiting and epigastric tenderness; and quinia was administered in doses of grs. viij., every three hours, as a tonic and in reference to the possibility

of malarious influence. The patient's mind was at this time perfectly clear, and he said that he had at no time had a chill, but had been attacked suddenly on ship-board, with headache and vomiting, between 10 and 12 o'clock in the morning of the Friday before his admission. He had sailed from the port of Matanzas in Cuba, where yellow fever was prevailing. One of his shipmates was taken sick on the same day with himself, and had died on board with black vomit.

On the following day, Thursday the 18th, he was manifestly worse, notwithstanding his own assertion that he felt better. The bowels had been moved, and the kidneys were acting naturally.—The headache and gastric pain had ceased, but the pulse was weaker, and the capillary congestion, or rather stagnation, had increased to an extreme degree, so that the white trace made by drawing a finger over the surface, continued visible for a considerable time. There was also more or less stupor from which the patient could be aroused by questions addressed to him.

Port wine was ordered every two hours; but he continued to sink, and died on the next day, Friday.

Although nothing had been ejected from the stomach at all resembling black vomit, yet from the symptoms of the case, together with its history, the conclusion was reached, that the disease was yellow fever; and this opinion was confirmed by the autopsy made the next day, so far at least, as pathology throws any positive light upon this malady.

The liver was of normal size, weighing 3 pounds 1 1-2 ounces, thus excluding the possibility of the affection having been acute yellow atrophy. In colour it was lighter than natural, especially along the borders and in the left lobe, presenting a straw-colour; and upon making a section this change was more marked internally than upon the external surface. Its texture was soft and friable.

On placing small sections, taken from various parts of both lobes, beneath the microscope, universal and extreme fatty degeneration throughout every portion of the organ, was observed.

The hepatic cells themselves contained oil globules, larger and much more numerous than are normally found, and there was, besides, a vast number of free oil globules visible.

The evidence furnished by the microscope was of interest, as corroborating Prof. Clark's supposition, that the essential pathological condition in yellow fever, is an acute fatty degeneration of the liver.

The pathological significance of the change in the hepatic cells is very explicable, when it is considered how a fatty degeneration of the kidneys may disqualify these organs for their eliminating functions, and give rise to uræmic poisoning; for in a similar way the deparative action of the liver may be diminished or checked by the alteration in the hepatic cells, with the result of producing cholesteræmia and death.

In this way may be explained the coma and convulsions which are occasionally observed in fatal cases of yellow fever, and which have been supposed by some to depend on uræmia.

In other fatal cases, which have not presented these symptoms, it may be supposed that death occurs before the deparative function of the liver is much impaired.

CASE OF ACUPRESSURE EXERTED UPON POPLITEAL ARTERY, BY PROF. CHRISTOPHER JOHNSTON, OF BALTIMORE, MD. Reported by JUNIUS L. POWELL, M. D., Clinical Recorder in the University Hospital.

Mary L., colored, æt. 40. Admitted May 11th, suffering with elephantiasis of left leg; great enlargement of the parts; thickening and scaling off of the cuticle. Two or three of the toes have sloughed off, and the whole appearance is thoroughly that of the elephant's foot. The odour almost intolerable. Has been suffering with the disease about two years, and resulted from a blow on the outside the ankle-joint. By treatment it was apparently cured, but returned again this Spring, assuming the proportions which it had at the time of operation. It was gradually breaking down the constitution of the patient, and no treatment up to this time having any effect, she solicited amputation, and Prof. Johnston removed the leg Wednesday, May 15th.

Tourniquet properly applied, chloroform administered, he performed the flap operation of Prof. Nathan Smith, the extremities of the flaps extending down below the knee about two inches, almost to the diseased part, the anterior one being dissected up from the bone, leaving out the patella, and their base being about one and a half inches above the condyles of the femur, where the bone was divided. Acupressure was then applied, four needles, the first a large flat needle, passed under the popliteal artery, just below the point where it takes its name, and a piece of iron wire—the silver not being in the house—looped over the vessel, drawn tightly, twisted and left hanging out of an opening in the flaps. Hæmorrhage subsequently recurring from the mouth of vessel, a second needle was passed under the artery, nearer its divided extremity, in order to check the combined oozing of blood, which Prof. J. thought due to a small collateral circulation. This last needle was about half inch below the first. A muscular branch to the outside of popliteal was then secured in the same way, and still another to the inside, though in this latter case, the needle was adjusted so as to exhibit pressure alone, without the aid of the wire being passed through the tissues, then over the vessel and through the tissues again. This last needle was removed the second day, (Friday) without any hæmorrhage. No dressing was used at all, merely a short bandage being wrapped around the stump to act as support, and prevent the greater weight of the posterior part from dragging so heavily upon the thin anterior flap, as to permit sloughing, and let the bone protrude. The stump was then placed upon a pillow, and permitted to rest at an angle of about forty-five degrees.

Saturday, 18th.—Prof. J. removes the acupressure entirely, and no bleeding ensues. The part doing well; she has some fever with small, weak pulse. Small quantities brandy directed and plenty nourishment.

Monday, 20th.—Good deal discharged to-day. Pulse, 120.

Tuesday, 21st.—Patient about the same as yesterday.

Wednesday, 22nd.—Prof. J. did not see her to-day. No material change. Stump doing well.

Thursday, 23d.—She had a severe rigor this morning. Says she

has been subject to them. Bowels not been moved for some time. Dose oil directed.

℞.—Brandy, ℥i., ter die.

℞.—Quinia Sulph. grs. iij., ter die.

Friday, 24th.—Bowels moved once by the oil. Patient very feeble and has a good deal of cough, dependent upon an old disease of the lungs. Pulse, 160.

Prof. J. empties bladder with gum catheter, and directs brandy, ℥ ss., every two hours.

Saturday, 25th.—Still very weak and good deal reduced, but stump doing well. Nearly all discharge ceased.

Monday, 27th.—Patient died this morning.

ORIGINAL CORRESPONDENCE.

"Sit mihi Fas scribere audita."

[*Extract from a Paris Letter.*]

I will call these remarks in my letters a short review of the General Pathology of Syphilis.

You know that for some time I have been giving a great deal of attention to this particular branch, in accordance with your advice and that of Dr. Hodgen; also from my own knowledge that the study of venereal disease has been sadly neglected in our American cities, to which neglect many members of the human family can testify. By consent of the Profession in America, it seems a field left entirely to the management of charlatans; to such an extent, indeed, that the younger members of the Profession attempt to shun it for fear of earning the name of "Pock Doctor." It is this very neglect of venereal diseases by the Profession that has thrown them open to jugglers and swindlers, and as a consequence of their study being pursued by these men, it has gained for its votaries, the unenviable title of "pock doctors," which name I must say is, in nine-tenths of the cases, well applied. But if, instead

of deserting and leaving it to the disposal of the hyenas of the Medical Profession, we were to give a sufficient amount of time and labour to the study of this intricate branch, and place it in its proper position among the other branches of our Profession, it would soon lose the hideousness that it now presents to the young man just entering upon his Professional career.

I do not propose to enter upon the defence of, nor speak against the study of syphilography, but I would wish for the sake of erring humanity that more attention be given in the future to this horrible scourge which is making such immense strides in America.

I am going to endeavour, in the course of these letters, to give you a general outline of the pathology of syphilis, in as short a space as possible. You are aware that in order to enter into the minutiæ, it would require more time, labour, and material than I have. This, you know, will all be borrowed material, and I only wish to lay before you the pathology as it is considered here to-day, and if I accomplish this I will be amply repaid for my researches and trouble. Some portions I have extracted from the writings of M. Ricord; others from M. Rollet; also from the number of monographs, endeavouring throughout to keep from falling into their peculiar theories or dogmas, confining myself to the accepted portions of their writings. I will be compelled to go a little into the history of syphilis, in order to lay before you the different theories, and finally to prove the one which I think to be correct, and which is supported by the most able syphilographers in France. I will not attempt to prove either the ancient or modern origin of syphilis, nor will I attempt a detailed history of it, further than to refer to some of the writers of the early days to prove a point in a theory as I have already mentioned. These letters suggested themselves to me as being the best way of giving you an idea of this particular branch of science, by being at the same time methodical and concise. There is not a branch of the medical science which has submitted in the last few years to more changes than syphilography. I will commence by giving you a short account of the different theories, afterwards considering each in detail, as far as the space to which I have limited myself will permit.

A great many opinions have been entertained and promulgated on the plurality or singleness of the venereal disease. Some syphilographers, styling themselves identists, follow the erroneous opinions entertained by the physicians of the last two centuries, and believe that the syphilitic infection can début indifferently by gonorrhœa, simple chancre, soft chancre, and by the indurated chancre. The non-identists contend that gonorrhœa is never followed by constitutional symptoms. They are divided into two classes, which the French call "uniciste's" and "dualistés." The former believe in the identity of the indurated and soft chancre; the latter hold that the indurated chancre is always the first symptom of constitutional or true syphilis. They say that the soft bears not a single relation to the indurated chancre; that it is a contagious ulceration which has existed ever since the world began; and on the contrary, aver that true syphilis, is of modern origin. In 1854, M. Clerc proclaimed the theory of hybridity, which attaches itself to the theory of dualism. He says, the soft chancre (I wish it to be understood that I use the terms soft chancre, simple chancre, and chancroid synonymously) is a derivation of the indurated chancre, but that it transmits itself in its own kind; *i. e.*, gives by inoculation or contagion a soft chancre.

Let us now enter into a few details of each of these theories considered separately. As I before remarked, the doctrine professed by the identists had during several centuries a sovereign reign. However, the first authors who wrote on syphilis, and among them Alexander Benedictus and Marcellus Cumanus, did not confound syphilis with soft chancre nor with gonorrhœa. It was in 1530 that the distinction between these three diseases terminated and the theory of identity appeared. This theory was unanimously adopted by the physicians of the sixteenth, seventeenth, and eighteenth centuries. In 1741, Van Swieten, in his commentaries on the aphorisms of Boerhaave, said that gonorrhœa did not have a single relation to the discharges from the urethra described by the ancients. Admitting the American origin of syphilis he tried to prove that the true gonorrhœa, which he considered a syphilitic manifestation, had appeared for the first time in the famous epidemic of the fifteenth century. Astruc (1777) adopting the same ideas on the origin of

syphilis, sought to explain why the syphilitic virus did not constantly produce the same primary manifestation. He thought that by "moiteur superficielle"—superficial moisture—there was chancre, by exhalation there was gonorrhœa, and by absorption the bubo would be produced. The reasons given by Astruc are not convincing, nor even very intelligible.

Sanchez (1785) differed from Astruc in his opinions on the origin of syphilis, but thought as he that syphilis could début indifferently by chancre or gonorrhœa. Davau (1745) extended the circle of the primary symptoms of syphilis, and added to them leucorrhœa. The majority of the physicians contended for this, as also for the specific nature of vegetations. Fabre (1782), in a treatise on Venereal Diseases, had a great success, and was for a long time the standard author in proclaiming the identity theory. He proposed a doubt, however, by saying that chancres were followed by secondary symptoms more rapidly than gonorrhœa. John Hunter (1786), who arrayed himself under the banner of the identists, was, it appears, very little convinced of the truth of their doctrines, since he wrote that gonorrhœa is only followed one time in a hundred by constitutional symptoms; this assertion can not be accepted by the identists as perfect authority. Nisbet (1788), overdoing the ideas of John Hunter, but at the same time professing his belief in the singleness or identity of the two kinds of chancres, said that gonorrhœa is never followed by general symptoms unless it is complicated with erosions of the mucous membrane—in a word, with chancre. It can easily be seen that Nisbet was an identist. Cullerier (1788) admitted with his contemporary, Swediaur, a syphilitic variety of gonorrhœa, but thought there was an additional variety non-syphilitic and contagious in its nature. This was the first step towards the theory of non-identity. M. Lagneau (1828), a pupil of M. Cullerier, whose treatise on Venereal Diseases served as a book of instruction for several generations, entertained views scarcely differing from those of his teacher. He described also two kinds of gonorrhœa, virulent and non-virulent. To-day the theory of identity has very few representatives, but among these few are some very eminent medical gentlemen. I will mention only three or four of the most prominent,—MM. Velpeau, Cazenave and Devergie.

The theory of non-identity was brought into notice for the first time by Balfour, and was advocated a few years later (1777) by Prof. Tode, of Copenhagen, in a monograph which excited the most violent storms of anger and abuse against its author, simply because he dared to think differently on a scientific dogma which was admitted by the German Universities. In 1793, Benj. Bell adopted the same theory, and reinforced and supported it by new arguments. He demonstrated that gonorrhœa is never followed by constitutional symptoms; that it is an affection purely local, and bears not the least relation to syphilis. The Medical Profession after putting them to the test, accepted the views of Bell. A proposition was made to the Medical Society of Besancon in the following form: To determine by experiments and conclusive observations if there is any identity of nature between the virus of gonorrhœa and that of syphilis; also, if the one can produce the other, and if the treatment which is proper in the one is also applicable to the other. A surgeon by the name of Hernandez (1812), a Professor in the School of Medicine of Toulon, sent to the Society the following memoir, which is manifestly very convincing in favour of non-identity. The author proved by a long and conclusive argument, too long to be inserted here: 1st. Historically, that syphilis and gonorrhœa had not appeared at the same time. 2d. Experimentally, by numerous inoculations, that the virus of gonorrhœa gives only gonorrhœa, and never a chancre. 3d. That gonorrhœa is never followed by constitutional symptoms. It was in this third part of his communication that the concealed urethral chancre was first brought into notice, and explained the rare cases in which gonorrhœa had communicated chancre. This hypothesis has since received a complete confirmation. The doctrine professed by Hernandez first made its appearance in France in the clinical teachings of Cullerier—a nephew of the Cullerier before mentioned—who, leaving the teachings of his family and abandoning his first opinions, adopted the new theory. M. Ricord, his successor at the Midi, embraced his ideas with ardor. He accumulated in defence of them proofs without number, and during thirty years, made himself their devoted champion. Scarcely was this success gained, when there was a division regarding syphilis. Two new theories

arose: "Unicité" or sameness, and "Dualité" or distinctness in the syphilitic virus.

"Unicité" is the doctrine which the Midi School in the days of Ricord endeavoured to place before all others. Its partisans believe in the identity of the virus of the indurated and soft chancre. The virus, according to them, produces a soft chancre or an indurated chancre, according to the idiosyncrasy of the individual affected. This doctrine, except the elimination of gonorrhœa as a source of syphilitic infection, is almost as old as syphilis itself. At the time when the lymphatic vessels were unknown, the inflammatory bubo was considered a favourable crisis, and was thought to prevent the disease from pursuing its course. Nicholas Massa (1534) wrote that the buboes were a species of emunctory, and served to throw out the virus and purify the economy. Thiery de Hery says in his work, if a bubo arises during a venereal affection, the ulcer will be cured and the patient will be exempt from constitutional symptoms. Ambroise Paré also said that the virus will affect the blood if the buboes do not discharge their contents. They confounded at that time the two kinds of chancre, but it will be noticed that they remarked the dissimilarity of the consequences. After the discovery of the lymphatic vessels, Astruc and Petit Podel (1812), to explain the non-infection of the system in certain cases, and its infection in others, pretended that it is the inflammation of which the chancre is the seat that prevents the penetration of the virus into the blood. This hypothesis is not admissible, for there are a great many cases where the simple chancre is not inflamed, nor gives a bubo, nor is infectant. An explanation more sensible was given by Vacca Berlinghieri, in 1800. He thought that the glands have the property of arresting the penetration of the pus, and also considered the phlegmonous bubo a sign of the arrest of the syphilitic virus which is then eliminated by suppuration.

All these explanations, more or less rational, do not justify the doctrine of the singleness of the syphilitic virus. How can they, with this theory, account for the coëxistence of the indurated and simple chancre on the same person? How can they explain these rapid changes in idiosyncrasy?

"Dualité," the theory of a double virus, is the most popular

theory here now, and I may in fact say the only one, as the others have so very few representatives that I think I can safely range them among the theories of the past. In order to be consistent I ought to give a portion of the history of this theory, but if I commence, it will necessitate the proving it to be of ancient or modern origin, and a crowd of other facts which would occupy your time for nothing. Suffice it to say, as I mentioned above, that all the authors and teachers of to-day adopt this theory. Let us, however, look at the fundamental tenets of the theory. According to it, the indurated and soft chancre have only the common relationship of appearance and position, and constitute two morbid states entirely different. Heusler, in 1789, originated the idea of the double virus. He contended that the soft chancre was known to the ancients, and that the indurated chancre, on the contrary, was a new disease. Jomdt, in 1834, expressed the same opinion. The honour, however, is generally conceded to M. Bassereau, of this city. To make a long story short, the history of syphilis, according to this doctrine, can be put under two principle heads:

1st. The soft chancre was known by the ancients, and has not a single relation to true syphilis.

2d. Syphilis, or the indurated chancre, is of modern origin. It was imported into Europe after the discovery of the American continent.

Let its origin be from whence it may, one thing is certain; it did not make its appearance in Europe until towards the end of the fifteenth century, and not a single trace of it can be found in antiquity, or in the middle ages. The modern origin of syphilis, and the antiquity of soft chancre are excellent arguments in favour of dualism. Since M. Bassereau has announced this theory, new facts have come to confirm it. In 1855, M. Clerc, in experimentally demonstrating that the indurated chancre could not be inoculated on the patient already infected, and that the soft chancre could be inoculated without limit, drew more closely and finely the difference which separated these affections. We will see when we come to treat of the pathology proper, that the duration of the incubation is not a less important difference. It was only towards the middle of the sixteenth century, that Massa Brassavoli confounded the two

varieties of chancre; this confusion has existed until comparatively recently, and has rendered difficult and slow the progress of syphilography.

Let us glance at the "hybridity" theory of M. Clerc. As a consequence it approaches very closely the theory of dualism, but its principle is not the same; according to the author of this hypothesis, the soft chancre, which he terms chancroid, is a derived affection,—a hybrid of syphilis, just as varioloid of variola. "*The point of departure of the chancroid or simple chancre would have been the inoculation of an indurated chancre on an individual who had had constitutional or infecting syphilis.*" This inoculation gave rise to a hybrid lesion, the simple chancre, which had been able to transmit itself in its own kind. M. Clerc differs from M. Bassereau only in the origin of the simple chancre; but believes with him that it is a local lesion which can be inoculated on the subject who carries it; and finally, that it is never followed by constitutional symptoms.

Syphilis is a virulent malady. Let us first ask ourselves, What is a virulent malady? It is a disease arising from the introduction of a virus into the economy. General theories have been advanced on the nature of the virus. No one can isolate it either by clinical or physical procedure. M. Pasteur has compared it to a ferment; thus bringing into notice again the hypothesis of Swediaur, who said towards the end of the last century: "It appears probable to me that the syphilitic virus multiplies itself by a kind of fermentation." The definition given by Mr. Chas. Robin, Professor in the Faculty of Medicine in France, is generally believed to be more admissible. The virus, according to him, is an alteration of the anatomical elements as well as the humours, and especially of the coagulable substances. The virulent state is a particular condition of the organized substances, transmitting itself molecule by molecule in the economy. When the action of the virus ceases, it is not because it has left the economy, but because the blood, which has become virulent just as the tissues, returns, from the effects of medicine or otherwise, to the molecular condition it had before the infection.

There is between a virus and venom this capital difference: Virus, at least for a time, renders the economy virulent and capable of

reproducing this virulent state on another subject; whilst venom, which can kill or determine grave accidents, limits its effects to the individual attacked, and does not transmit to the humours the power of causing similar accidents. Poison and venom both act in the same way; also the violence of their action depends on the amount introduced into the economy. The quantity of the virus is of no importance; let the amount be ever so small, it produces the same effects. Virus transmits itself directly by inoculation, and indirectly by infection.

The effects of virus are less prompt than those of venom, a longer or shorter time always separating its introduction into the economy from the first apparent manifestations. This lapse of time is called the period of incubation. It is a time, says M. Monneret, of silent elaboration not accessible to our senses. This period of apparent inactivity is common to all virulent diseases. According to M. Monneret, it appears in all diseases incontestably inoculable, and only differs in its relative duration.

If the doctrine of "dualité" needed another proof, what better could any one desire than the absence of a period of incubation in inoculations from the soft chancre, and its constant presence in similar inoculations from the indurated chancre? There are very few authors of to-day who deny the period of incubation. M. Diday, who, at the instigation of M. Ricord, long sustained the non-incubation of the chancre, has returned to his first opinion. M. Faltin, M. Baerensprung, Mr. Lee, etc., entertain the same belief. By collecting all observations, M. Rollet has established beyond a doubt that incubation is always present, and its average duration is twenty-five days. According to M. Clerc, it would be only fourteen days. M. Bellehomme saw, in the Saint Lazare Hospital, the indurated chancre make its appearance sixty days after the entrance of the patient. The average of twenty-five days of M. Rollet is generally accepted as the true duration of incubation. There are two opinions regarding incubation among those authors who admit it: According to some—the larger number—the virus is absorbed almost immediately after inoculation, and the period of incubation is the lapse of time necessary for the introduced virus to infect the entire economy, and render it capable of reproducing and multiplying the same virus.

According to others, it is the period of time necessary for the virus to produce the local accident, chancre, regarding this local accident as the cause and not the consequence of the general infection. According to the first opinion, it would be impossible to prevent the consecutive effects by destroying the chancre. The advocates of the last opinion, however, believe that it is easy to prevent the general effects by destroying by cauterization or otherwise the local accident, which they regard as the cause. Which is the more generally accepted of these two opinions? The second has to defend it the high authority of M. Ricord. But it must be remembered that when he wrote in its favour—1851, Letters on Syphilis—he denied with vehemence the existence of two distinct species of virus. He taught that every chancre could become indurated, and as a consequence infectant. The first opinion, which considers the chancre as the first manifestation of the general state, has to sustain it the largest number of syphilographers. M. Cazenave, of the St. Louis Hospital, was the first to explain it clearly. Vidal de Cassis, in his treatise on Venereal Diseases, says that when the chancre is formed, infection has already taken place. Before them MM. Baumes, Clerc, Rollet, and Follin had admitted it.

In 1848, M. Renault presented to the Academy of Medicine of France, a collection of numerous experiments practiced on animals, to determine if the virus glanders and rot was absorbed immediately after the introduction. Thirteen horses were inoculated with the glanders virus, and all were cauterized with a red hot iron at times approaching more and more nearly the moment of inoculation, varying from ninety-six hours to one hour. All were attacked with glanders. The results were still more striking, if possible, in the experiments on the virus of rot. He inoculated twenty sheep, and cauterized the point of insertion thirty, twenty, fifteen, ten, and finally five minutes after the inoculation, but all the sheep were infected.

It is not, then, doubtful, after the experiments of M. Renault, that the virus of glanders and rot is immediately absorbed. MM. Bellehomme and Aimé Martin, two of the warmest adherents to this opinion, say: "We do not pretend that all virus is immediately absorbed. The rapidity depends on the virus inoculated, and upon the tissue in which it is deposited."

Let us now see what takes place in the case of vaccine virus: MM. Bosquet and Steinbrenner, two of the best authorities on vaccination, believe that as soon as the virus is introduced under the derma it is absorbed, and the general infection is commenced; so that there is then for vaccine, as for all virulent diseases, a period of incubation. They both believe that vaccine matter can exert its preventive power without producing a single local accident or pustule. Science has then learned that the virus of glanders, rot, and cow-pox inoculated in a healthy individual are absorbed almost immediately, and that the general disease is not dependent on a local accident which may be wanting entirely and is in all cases only a result of the infection of the economy. If it is then the case for these three diseases, we may infer from them that the same thing also occurs in syphilis. Otherwise it would be necessary to suppose that the virus during this long incubation, on an average of twenty-five days, contrary to the teachings of physiology—contrary also to the experiences that I have just mentioned—rests isolated on the tissues without mixing itself with the blood or lymph. I canno understand this isolation. By what organic law can it be explained? Why, at the end of twenty-five days does this virus, so long enclosed in narrow limits, break through the obstacles which oppose themselves to its diffusion in the economy? What would be the explanation of this long local incubation? Most of the authors conclude from the foregoing:

1st. That the syphilitic virus introduced into the tissues is rapidly absorbed.

2d. The period called incubation is necessary for the virus to penetrate the entire system, and reproduce itself.

3d. Destruction, by cauterization or otherwise, does not prevent the general infection.

4th. The indurated chancre is only the first manifestation of the syphilitic cachexia.

The contagion of syphilis is one of the most important points, and also one of the most disputed. Is the *chancre alone* contagious? The secondary and tertiary accidents, are they also transmissible? Can a person contract syphilis from the blood or the secretions of a

person with syphilis? Such are the questions which for nearly twenty years raised so many passionate discussions.

During a long time, to believe that the primitive chancre alone could transmit syphilis, was one of the articles of faith of the Midi Hospital. M. Ricord based his opinion on the fact, that syphilis never commences otherwise than by a chancre. He did not reflect that no virulent disease repeats itself; that is, that one attack exempts from a second, the same person never bearing the same disease oftener than once. If, for example, a hearty person exposes himself to the contact of one with small-pox, in whom the disease has reached the pustular stage, could any one think that *small-pox* would début on that person by pustules? No: on the contrary, it would commence by the premonitory symptoms; it would present all its regular phases. Syphilis would evidently follow the same course whatever the source from whence the virus was drawn. I will endeavour in my next to show, that this source does not reside alone in the chancre.—*St. Louis Medical and Surgical Journal.*

PHILADELPHIA, August, 1867.

The health of our City still remains good. A year ago and the grim Destroyer, in the shape of Asiatic Cholera, was claiming daily, his thirty victims. To what we can ascribe our immunity this season, it is hard to say. Our streets and sewers, it is true, are in a more cleanly condition, thanks to the rain which has visited us often through the Summer; but our inhabitants are as imprudent as ever, and the markets abound as of old in fruits, ripe and unripe. One thing is very certain, our City has not been made ready to oppose the invader, we so much dreaded, through the instrumentality of our model (!) City government; for not one dollar has been contributed to the praiseworthy object of clearing out the *debris* of filth, which "stinketh in the nostrils" in many parts of Philadelphia. It is time, however, we should cease to expect any exhibition of wisdom and foresight on the part of Councils.

It has been suggested, and wisely too, that these bodies that preside over us here, should be *abated, as nuisances to the public weal.*— I hope the abatement may be made, and at an early day. The mortality report for the last week numbered about thirty less than for the week preceeding, and some hundred and twenty less than for the corresponding week, last year. There were 56 deaths from cholera infantum; a falling off, as as high as 90 and 98 deaths of little ones from this scourge have been reported this season. It is said that some cases of cholera have appeared, but as there is no evidence in regard to it, and a general denial given it, I am inclined to think the report erroneous. Certain it is, no Physicians of my acquaintance, have had any cases; and I have seen no authorized statement from the Board of Health to that effect. By-the-by, Professor Kletzinsky, of Berlin, states in an article (a very able one) on disinfectants, that it requires a degree of cold marking as low as ten degrees below zero, to destroy the nubility of the cholera germ. According to that statement, we seldom enjoy an immunity from its ravages.

Speaking of cholera, it is interesting to scan the various lists of our medical publishers, and note the absolute plethora of *cholera literature.* Lectures, dissertations, monographs, large works, opinions, and speculations, meet our glance everywhere. From this mass, it is difficult to select that which is best. Dr. F. A. Burrall, of New York, has written a duodecimo volume on Asiatic Cholera, published by the house of Wm. Wood & Co., N. Y., which is the most complete resumè that has been written, and is, I suppose, an excellent work for the times. It is comprehensive, terse, and valuable. Professor Wm. K. Bowling, of Nashville, has issued an octavo of 27 pages on the "Cholera as it appeared in Nashville, Tenn., in 1849, 1850, 1854, and 1866." This little work is interesting on account of statistics, though it must be confessed, from reading it, that the facts, memoranda, etc., were, to say the least, very loosely collated. There is an entire omission in regard to hygienic measures or precautions, and I don't believe the word "disinfectant" is once used in the treatise. Nor does Professor Bowling's treatment find much favour in Philadelphia—"Four grs. of opium, to five of calomel," following each watery stool.—

This was successful, the Doctor says, except among "fruit and vegetable eaters." He gave ice to allay gastric irritation, &c.—Now, in Philadelphia it was especially observed that *good* fruit and vegetables seemed, so far from provoking cholera, to ward it off, as it were. In convalescence also, *good* fruit and vegetables, so far from being interdicted, were directed for the patient.

The colleges are closed and deserted, save by the ever-present janitor. Clinics have long since closed everywhere—having remained open at the Pennsylvania Hospital longer than any where else. The different colleges, however, are being put in order for the incoming class, which is expected to be very large. The sub-schools, too, the private lecture classes, &c., are looking up and preparing for work. Once establish the sound plan of teaching, in our colleges, recommended by Prof. Gross last Summer at Cincinnati, and we will have no need for "quizzes" and private lectures. But when will the public be blessed, by the adoption of those rules? The sooner, the less mortality will there be in the land. The ignorance in our medical schools, is to a certain extent, absolutely appalling. When I went to college, there was a young man in my class who insisted on spelling (*in his thesis,*) phosphorous, thus—*fosfrous*, and yet by the aid of a "quiz" and a good memory, that man graduated. He did not know the difference between cream of tartar and blue mass; yet he stood up with head as high as Cleopatra's needle, when he graduated. Once adopt Prof. Gross' plan, and the Profession would be rid of such *canaille*. If our colleges would only do what is required at the Tremont Medical school, much good would result, viz.: require an examination in the arts and sciences, as *preparatory* to entrance into College, and then institute (as has always been done in the school mentioned) *daily oral* recitations. The good thus eventually to be accomplished, would be incalculable. I may in another letter refer again to this point.

Our Physicians are, every one, it seems, bent on making *something* out of bromide of potassium. It is used for almost every complaint and evil "to which flesh is heir." One uses it as an anti-epileptic—another as an anodyne, in cases *where nothing else will do* (*?*)—another says it is the greatest *anaphrodisiac* under the sun—another says, that never before have we had in our reach such

a fine *aphrodisiac*, and so on ad infinitum. It is my opinion, that like every other new (or comparatively new) remedy, it *must* have its day—*must* be a panacea for every disease, for a short while, and then, as is the case with quinine, it will settle down to its proper place.

In a former letter the name of Dr. R. J. Levis was unintentionally omitted from the list of Summer Professors in the Jefferson School. He is in charge of the Chair of Ophthalmic Surgery, and very ably does he fill it.

Dr. Cohen's work on Medical Inhalations, is now passing through the press of Messrs. Lindsay & Blakiston, of Philadelphia. It is a fine work. I have material enough for an interesting letter, which I must postpone. W. M. T.

CHARLESTON, July, 1867.

I am much gratified at the stand which you have taken on the value of "office" instruction; and can corroborate all that you have said in its favour. My pupils—and I have had many—have, without exception, told me that they derived more knowledge from me, in the ordinary colloquial style, and by my examination of them on the text books, than they did from the formal lectures of a college.

I could enlarge on this theme, were I not afraid of tiring you.

D. J. C.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

"Judex Damnatur cum nocens Absolvitur."

ESSENTIALS OF THE PRINCIPLES AND PRACTICE OF MEDICINE. By HENRY HARTSHORNE, M. D., Professor of Hygiene in the University of Pennsylvania, Auxiliary Faculty of Medicine.

The author tells us, in the preface, that "this manual is an unambitious effort to make useful, the experience of twenty years

of private and hospital medical practice, with its attendant study and reflection." It is not placed in competition with any of the existing voluminous treatises on the same subject; and, therefore, does not abound in minutiæ of detail, which may be found in the larger Works. The student of medicine will not meet here, with multitudinous references, especially of treatment, which are more calculated to confuse, than they are to direct, in the adoption of remedial measures.

Upon the basis of observation and experience, the student is counselled to use the means, which the author esteems the most efficient.

The arrangement of the Work is good, and has in it much that is desirable. The *introduction* is a review of the various systems of medicine; not an historical discussion of their philosophy, nor is it an attempted history of medicine, but in clear and concise expression, "the most essential phases and mutations of medical opinion, in times past and present," are given.

Then follow *sections* of general pathology, semeiology, including rational and physical diagnosis, general therapeutics and nosology, which are well sustained in an elucidation of sound principles and practice, by reference to well known and accepted authorities.

The second part of the Work is devoted to special pathology and the practice of medicine; and here the author has performed his self-imposed task ably and fully—in compact and faithfully executed delineations, the author has exhibited the acumen of the close clinical observer. Whilst this Work may be of great assistance to the student of medicine, it is one not unworthy of the perusal and study of the Practitioner, as its teachings are eminently practical, conservative and highly suggestive. It is the best of the Handy-Books, which we have seen, and will sustain the author's reputation for varied and accurate information of his Profession.

A. M S.

MISCELLANEOUS.

"Non Omnes Eadem mirantur Ament que."—Hor.

Clinical Thermometry in Diphtheria.—By Joseph G. Richardson, M. D.—Though simplest among the many contributions which during the past decade medicine has received at the hands of her sister sciences, such as the endoscope, sphygmograph and laryngoscope, the clinical thermometer seems to promise the most general and practical advantage, inasmuch as it requires for its application no prolonged experience or particular instruction, and may be usefully employed in almost every case which demands the study of either specialist or general practitioner. Its instrumental aid has thus far been invoked and its capacities tested more or less completely in a majority of the diseases which come beneath our notice; but among the minority which have hitherto remained almost untried by its standard, probably none are of more importance than diphtheria, which, on account of its general prevalence and its obscure etiology, as well as its fatality, so great and sometimes so unexpected, appears to require further elucidation at the hands of every scientific physician. The seeming neglect in this respect which it has undergone may be, no doubt, in part ascribed to the fact that it is a disease not very common in our chief cities, and especially unusual in those large hospitals where, judging by notices published in medical periodicals both of this country and of Europe, most thermometric researches thus far recorded have been carried on.

The circumstance of being located in an intensely diphtheritic region, by rendering necessary an almost daily intercourse with different grades of the affection during the past winter, has afforded me an opportunity to supply this omission and to record numerous observations upon the range of temperature in diphtheria, of which I propose to give an abstract in this paper, and also to set forth a few important deductions as to their prognostic and therapeutic worth, which I hope may at least furnish a basis of data for more extended investigation, and constitute a nucleus around which may be gathered other facts which shall combine with these to afford invaluable assistance in many a future struggle with this formidable affection. Who, indeed, that has been called upon to combat this most deceitful malady, and has beheld the insidious foe creeping onward and downward towards the tracheal aperture with an unseen and stealthy progress, which, if unchecked, must soon hurry its

victim to the grave, has not ardently desired some feasible method of discovering how rapid was its course when it passed beyond the bound of direct vision, and how soon the cessation of its advance might be expected? that he might on the one hand inspire with new hope the despairing patient, or on the other arouse to new energy his own and the attendants' efforts. Or, again, which of us who has been called upon to undertake the heavy responsibility of performing or abstaining from tracheotomy has not felt, as the diphtheritic patient, gasping for breath, turned upon us his imploring eye with a whispered but eloquent appeal for relief from his agonizing sufferings, an anxious longing for some test which should indicate with an approach to certainty how near the violence of the disease was spent, and also what stock of failing strength remained to support the system under the operation? Such a means we have offered to us in the clinical thermometer, which for its aid to our Profession, not only in diphtheria, but likewise in others of "the ills that flesh is heir to," must, I think, hold its place with the stethoscope of Laennec and the pleximeter of Piorry.

Perhaps these statements can be most satisfactorily illustrated by transcribing from my note-book, the records of two or three severe cases, and then giving an abstract of results from the whole series of thermometric observations, which are about sixty-five in number. The first case selected was remarkable for the high temperature (being more elevated than any other noted,) the quantity and rapid formation of the exudation thrown out, and the promptness with which it yielded to treatment. Miss Sarah S., aged seventeen, of fair complexion, nervous temperament, and rather delicate constitution, was attacked on the 21st of February, 1867, with very severe headache, pains in the back and limbs, accompanied at first by slight rigors, which gave way after a few hours to high febrile action. About 9 P. M., when I saw her first, her pulse was 132 per minute, and her temperature, as ascertained by introducing the bulb of a clinical thermometer into the axilla, closing the arm tightly over it, and allowing it to remain eight minutes, was found to be 102½ degrees. Her right tonsil was much swollen, deeply injected, and very painful, but had only three small spots near its centre; her strength was much prostrated, so that she sat up with difficulty for me to examine her throat. On the following morning, February 22, her pulse was 120 per minute, her temperature 102 degrees, the right tonsil was covered with a patch of thick, heavy, false membrane, whose area was estimated at 70 square lines, while the left exhibited a similar deposit over about half that much surface. Her headache was much relieved, although the pain in her limbs and prostration of strength remained about the same; her

tongue was much coated, breath very offensive, and anorexia complete. In the evening her pulse had fallen to 100 beats per minute, and her temperature to 100 degrees; the superficial area of false membrane on each tonsil was about the same as observed on the previous visit, but the circumjacent redness had somewhat lessened; she had hardly any headache; the pains in her extremities were much diminished; her appetite had commenced to return, and she had attempted to sit up during the afternoon, though compelled soon to relinquish the effort on account of the nausea which it produced. February 23.—I found that my patient had slept well the night before, and that her relish for food was greater, although the tongue was much furred, and she had still a little headache; her pulse beat 88 times in the minute, and her temperature had sunk to 99 1-4 degrees. Most of the false membrane had disappeared; on the right tonsil a surface of about 20 square lines, and on the left one of 30 square lines, was, however, still covered; the soreness at the time of my visit greater on the left side than on the right, although the latter had been first attacked. February 24.—Patient sitting up; pulse, 108; temperature, 98 1-4; right tonsil clear of false membrane; patch on left tonsil of about 5 square lines, situated near the top; has a little pain on swallowing, but less than yesterday; headache and pain in the limbs entirely gone, appetite good, tongue cleaner, fauces almost natural in colour. February 25.—Pulse, 84; temperature, 97½; throat quite clear of deposit, although the act of swallowing is still accompanied by a little pain; no headache; feels stronger; and has a good appetite with whose assistance she rapidly convalesced.

Case II. is chiefly worthy of note as showing the energetic efforts made by nature to overcome a violent attack of the disease, aided by unfavourable hygienic influences. It is that of Mr. Gilbert C., aged twenty, of vigorous frame and strong constitution, having never been sick before in his life, who was attacked on the 1st of March, 1867, with severe sore throat, headache, pains in his limbs, &c.; but, being unacquanted with illness, refused to see a physician until the morning of the 4th of March, when I was sent for and found him suffering from a good deal of headache and pain in the throat, which upon examination exhibited great swelling of the tonsils, so that they met in the middle, pushing the elongated uvula forwards: the right tonsil was the most affected, being covered with a layer of yellowish false membrane, estimated at 170 square lines in area, while the left was coated to the extent of about 80 square lines; his pulse was 80 per minute; temperature, 99½. At 6 P. M. of the same day his pulse beat 90 per minute, and his temperature had risen to 101½ degrees. He stated that he thought

he had taken more cold the evening before, that his throat was fuller, and he felt more as if he must strangle during the night.—March 5, at 10 A. M. his pulse was 87; his temperature 100¾; had great difficulty of breathing all night—so much so that he was unable to lie down, but sat up in a chair; was too distressed to admit of an examination of the fauces. At 8 P. M. on the same day his pulse was 84, and his temperatue 100 degrees. March 6, 9 A. M.—Pulse 86, and more feeble; temperature, 100 degrees; throat feels sore, but not much painful when at rest; on examination found to be less red and tumefied, so that the tonsils lay one quarter of an inch apart. The false membrane on the right tonsil covered about 60 square lines, on the left 30 square lines. Sat up all night in his chair, but dozed a little; ate a good breakfast with some relish; but his whispering voice and slight croupy cough made me feel very anxious in regard to his safety. At 6 P. M. his pulse was 96; his temperature, 99 1-4. He complained, however, that his head ached a good deal, and both he and his relatives dreaded the occurrence of brain fever, to which they stated their family was predisposed. The visit this evening was made in consultation with Dr. Test; and although the suppressed croupy cough (much more marked since morning,) the severe headache, and the intense feeling of strangulation, all combined to render our prognosis unfavourable, yet the regular decrease of temperature, as indicated by the thermometer, from 101½ on the evening of the 4th to 100¾ on the morning, 100 1-4 on the evening of the 5th, 100 in the morning, and 99¾ at the time of our visit on the 6th, encouraged us to entertain the hope that the disease was so far abating, that should these symptoms be, as we anticipated, the results of partial separation of the false membrane, about to come away, a favourable termination might yet be expected.

On the morning of the 7th, at 9 A. M., I found his pulse only 76; his temperature, 99½; his cough loose and resonant, and his breathing comparatively unembarrrssed. I learned from his attendants that although the cough continued to become more croupy during the night, about 5 A. M. something seemed to loosen in his throat, feeling, as described in the patient's own words, as if "a cork was going backwards and forwards in his wind-pipe," which flapped up and down with a noise audible to his nurse for about half an hour, and was finally expelled with a violent struggle, during which suffocation appeared imminent. Since that time he had felt much easier, slept for about an hour, and was able to breathe and swallow with much more comfort.

At 6 P. M. on the 7th I found his condition still improved,

except that his pulse, which was 84 per minute, was rather more compressible; his temperature was 99¾.

I learned that about four and five o'clock that afternoon, respectively, he had severe choking spells, and after violent efforts coughed up two pieces of false membrane, which had been saved and were shown to me. The larger fragment was about two and a half inches long, half to three-quarters of an inch broad, and one-sixteenth of an inch in thickness. The smaller was nearly an inch square, assumed when floated out in water a semi-cylindrical form, and bore upon its thin convex surface distinct impressions of three of the tracheal rings, rendered more distinct by the fact that the intermediate portions of membrane were stained of a pinkish tint, apparently from the extravasation of blood.

March 8, 9 A. M.—His pulse beat 88, his temperature stood at 99¾ degrees. The tonsils were less swollen, and the exudation so far diminished that it covered an area of only about ten and five square lines on the right and left sides respectively. Had a severe attack of epistaxis last evening, notwithstanding which he slept some four hours, and felt better at the time of my visit.

In order to avoid occupying valuable time unnecessarily, I will proceed no further with particular notes of this case, merely stating that after a relapse of diphtheria, apparently the result of taking cold, he gradually improved until the 10th of April, when I was recalled to his bedside, and found him the subject of double pneumonitis, contracted by sitting at a window without a vest on, which proved fatal on the fifth day of its course.

Case III.—Miss Caroline S., æt. thirty-six, medium height, dark complexion, naturally of good constitution—perhaps a little debilitated by an attack of diphtheria about two years ago—was seized with sore throat on the 27th of April, 1867, while riding out after dark. When called to see her the day following, at 5 P. M., I found her pulse 120, her temperature in the axilla 102 degrees.—The right tonsil was a little swollen, and had two or three small specks of exudation upon it: the left was a good deal tumefied and reddened, showing near its upper part a patch of whitish false membrane, covering an area of 30 square lines. April 29, at 5½ P. M., I found her pulse 112, her temperature 101 degrees. Her headache was much less, but her throat was more sore and the difficulty of swallowing greater; slept about half of last night, and has eaten some food, but without relish. False membrane on right tonsil about 10 square lines, on left tonsil 140 square lines; palate very œdematous, but not coated with exudation. April 30.—Her pulse was beating 108 times per minute; her temperature, 101½ degrees;

respiration, 24 per minute. Left tonsil less sore and less swollen, but entirely covered with a patch of false membrane, estimated at 180 square lines. Right tonsil felt sore to-day for the first time, and at the period of my visit was quite painful and swollen, coated with about 100 square lines of exudation. Slept a little last night, but was awake often. Feels weaker than yesterday, so that it makes her dizzy to try to stand erect; but the headache and the pain in her limbs rather easier.

May 1.—Her pulse beat 104, her temperature 100 1-4 degrees, and her respirations 26. Left tonsil exhibited 120 square lines of false membrane, which was quite ragged and much loosened at the upper part; right tonsil more coated than yesterday, showing about 140 square lines. Had no pain in her limbs, and less in her throat, but feels much weaker, and her head aches more.

May 2, 5 P. M.—Pulse 104, temperature 100 1-4 degrees.—Slept better the night before, and had neither headache nor nausea during the day; did not feel any weaker than the day previous.—Right tonsil about the same coating as yesterday, 140 square lines; left tonsil 70 square lines, and reduced to about half the magnitude it had yesterday.

May 3.—Pulse 100 per minute, temperature 100 degrees. Left tonsil clear of exudation, but the posterior half arch behind it is covered with an elongated patch of about 30 square lines in area; false membrane upon the right tonsil estimated at 90 square lines. Palate still œdematous, but less so than yesterday. Soreness of throat diminished. No headache, no nausea. Slept most of the night, but perspired freely since daylight, and felt weaker than the day previous.

May 4.—Pulse 92, temperature 99 1-4 degrees. Left tonsil quite clear, and its posterior half arch only coated to the extent of about 5 square lines. Exudation on right tonsil estimated at 70 square lines. Slept all night; throat less painful, and although she took less stimulus, she felt stronger than she did the day previous at the time of my visit. Being the last time I saw the patient before my departure for Cincinnati, I can give no further notice of the case, which I hope, however, has by this time progressed to a favourable convalescence.

As these three well marked examples of the disease give a very fair exposition of the thermometric changes which occur during its course, I need occupy no more time in the narration of particular cases, but may proceed at once to detail briefly an abstract of all the observations I have made in the whole series of twelve attacks.

Of the first day of any attack I have no record. On the second my notes give the mean temperature 100 1-2, an average of thirteen observations, of which the highest was 102 1-2 degrees, occurring in two instances, and the lowest 99 degrees; the average pulse on the same day was 104 beats per minute. On the third day I find the mean temperature, as deduced from fourteen observations, 99 2-3 degrees; the pulse averaging 96 beats per minute. On the fourth day the average of ten observations gave a temperature of $98\frac{3}{4}$ degrees, while the average pulse had fallen to 85 per minute; while on the fifth day the average temperature had reached the normal standard of 98 1-2, while the pulse beat 72. I should mention that two of these patients were the subjects of valvular disease of the heart, and that the slow rate of their natural pulse has some slight effect in reducing the average frequency of the pulse as above given.

While the cases thus detailed are perhaps too few in number to insure absolute certainty for the following deductions, which further observations may in some minor respects modify, yet it would seem that we may safely draw the following general conclusions:

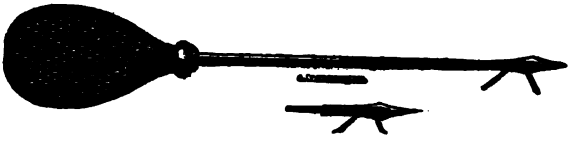
First—That the thermometric range in diphtheria is less elevated than that of most other acute diseases, and that hence in marked cases a comparatively low temperature of 102 or 102 1-2 degrees should not mislead the physician into considering the attack as of little importance.

Second—That as the changes of temperature appear to bear a closer relation to the amount of false membrane than do the variations in the pulse, we may on the one hand feel more assured of approaching convalescence by its fall, or on the other hand must entertain graver fears for our patient's safety, should it steadily rise, than by finding corresponding alterations in the rapidity of the heart's action.

And *thirdly*, therefore, that in these alarming cases, where the disease invades the larynx, and we are called upon to perform tracheotomy, if it affords any hope for the patient, a careful record of the thermometric changes supplies us with the best guide hitherto discovered, whether the exudation will be apt to extend rapidly further, and so render that serious operation utterly fruitless.—*Medical Record.*

A Postmortem Needle. By J. H. Hobart Berge, M. D., Brooklyn, N. Y.—There is no part of an autopsy so much dreaded as the *sewing up*. Hardly a surgeon has escaped pricking himself with the needle. Sometimes the integument is so tough that we are in danger

of puncturing our fingers with the blunt extremity of the needle. A thimble does not obviate the difficulty, since with its best aid the needle may either turn back or break. At my last experience of this sort, I resolved to devise an instrument which should answer all the indications. The following is the result:



The needle may be of any convenient length, with the eye sufficiently removed from the end to admit of its being accurately fitted to the calibre of a cylindrical style, which has a firm handle at the other extremity. I hardly need describe its use. When threaded, pass it through the integument like an awl,—seize the needle with the thumb and forefinger, and withdraw the handle,—now draw the thread tight. Re-insert the needle in the handle, and take the next stitch, and so on, and *sew* on. It is hoped that this little contribution may not only prove a comfort, by facilitating that which is sometimes a real labour, but also by saving much valuable time to those who procure for us our most valuable pathological specimens, and better still, that it lessens the number of those sad sacrifices to science—the deaths from dissection wounds. The instrument is made by George Tiemann & Co., 63 Chatham st., New York.

The Permanganate of Potash in the Treatment of Carbuncle.—The beneficial effects accruing from the local use of permanganate of potash in the treatment of sloughing ulcers, phlegmonous erysipelas, and hospital gangrene, having been most thoroughly tested and proved during the last year of the war, in army hospital life, it occurred to me that its peculiar remedial qualities would alike prove successful in that most painful and distressing lesion, carbuncle, originating, as it also does, from a depressed vitality, and a morbific condition of the blood. The most satisfactory and encouraging results have been obtained in the only cases in which I have had an opportunity to employ it.

Mrs. R., *æt.* about 60 years, was visited, during the absence from town of her family physician, and found suffering terribly from a carbuncle located upon the left shoulder-blade, just above the spine of the scapula, and occupying the supra-spinous fossa. Loss of sleep, constant pain, and a naturally nervous temperament combined, induced a mental disturbance almost amounting to delirium. The tumour was in its sixth day, with all the general accompaniments, of the size of a hen's egg, tumid, tense, and shining. A free crucial incision had been made two days before, but with no relief; dense areolar, puffy granulations, and sanious oozing crowded the track of the knife, with no appearance of separation or healthy action. The pulse was quick and compressible, 110 beats in the minute; countenance anxious and expressive of great

pain; bowels regular. A strong solution of the permanganate of potash (half drachm to f. 1 oz.) was immediately applied with a brush, and a dressing saturated with it, covered with oiled silk, placed upon the shoulder. Anodynes, beef-tea, milk-punch, tincture of the chloride of iron, and quinia were administered. The same evening, the patient was again seen, and expressed herself as feeling much relieved; pulse 98, and gaining in volume and elasticity. The next morning the dressing was removed, and already, although but twenty-five hours had elapsed, true pus had begun to form, the intense pain had subsided, and the patient to use her own language, declared it "a miracle;" the pain had vanished, the fever was gone; she had slept well, and felt some appetite for food. A few days longer the potash was continued; the slough separated, and the wound healed in the short space of one week.

Mr. C., æt. 50 years, shoemaker; was visited July 30th, 1866. Had been sick three days, was found suffering intensely from a carbuncle, situated upon the abdomen just below the umbilicus, of the size of a large walnut, and involving the surrounding structures in an erysipelatous inflammation. Bowels constipated; high fever; pulse 120; heavy breath; tongue furred; anxious countenance; great restlessness and general uneasiness characterized his principal symptoms. Hop and laudanum poultices had been applied, but he had been gradually growing worse, and approaching the position described, the tumour increasing daily, the parts becoming more dense, and at last an ichorous pus exuded from several small openings. Mild purgation, after which supporting and stimulant treatment was instituted. A slight incision was made, and the permanganate applied, as in the previous case, the dressings being removed once in twenty-four hours. This case was seen seven days successively; the 13th August he returned to his work, the severity of the suffering having been arrested after the first application.

Mrs. A., æt. about 49 years, having suffered a few days from a supposed furuncle, and the pain becoming intolerable, called in medical aid. There was found upon the inner face of the left thigh, just below the nates, a well-marked, though small, carbuncle; a very slight incision was made and the potash dressing used. No constitutional treatment at all was inaugurated; in three days all signs of carbuncle had disappeared and the line of incision was healing nicely.

The results in this case were mutually gratifying, from the fact that about six years ago the patient suffered from a series of carbuncles appearing in succession, along the spinal column, from the back of the neck to the region of the lumbar vertebræ, and, lasting all through the winter months, her dread and fear of similar suffering were very great. The permanganate of potash has been eminently successful with me in the treatment of chronic ulcers. The following case, of many years' duration and which had resisted all efforts, yielded to the remedial qualities of this preparation.

Arthur M., tavernkeeper, *æt.* 45, had a chronic indurated ulcer, of

sixteen years' standing, extending over the superior face of the right leg, about four inches below the tubercle of the tibia, and spreading backwark on both sides to the malleoli, covering a surface of about twenty-eight square inches, deep and burrowing in some localities, and in others merely superficial; the whole leg and foot were much swollen and anasarcous, the toes merely protruding from a shapeless mass of flesh, closely resembling the foot of a young elephant. An ichorous discharge of a horribly offensive character, together with filthy dressings, augmented the destruction of the surrounding parts.

The advice of an eminent surgeon had been secured a few weeks previously, to the effect that but one alternative remained, amputation; and indeed, all appearances favoured such a decision. Proper abstinence, tincture of iron and good diet were directed. The local use of a strong solution of the permanganate of potash and judicious bandaging have already done so much for this case that, at the date of writing, the tenth application of the potash, six square inches, will more than cover the small amount of ulceration remaining, so rapid have been the healing process and the formation of firm, healthy tissue; and, in a few days more, we can confidently prognosticate a complete cure.—*Amer. Jour. Med. Sciences.*

Danger Attending Eye Washes Containing Preparations of Lead.—From practical observations, made at the Hospital of Saint Sauveur at Lille, upon the evil effects of Collyria containing acetate of lead, quite frequently employed as an astringent in light cases of ophthalmia, a precipitate of lead was observed upon the cornea, a layer of chloride of lead which renders it dim, and forms erosions upon it, by destroying its epithelium. Vessels are developed upon the cornea, as it were, to resist this morbid process, and the precipitate, after its disappearance, leaves behind it an ulcer of the cornea and pannus, which it is often very difficult to remove—in fact a greater evil than that which it was first intended to remedy. The sight of the right eye was thus completely lost in a case, for whom the following collyrium had been prescribed: sub. acetate of lead, half drachm; Sydenham's laudanum, gtt xx; distilled water, oz. v. This is barely useful in some cases of pannus; and even blennorrhagic inoculation, instituted in Belgium, seems preferable in these cases; in proof of which several cases have been published in this "Revue." It is then safer to erase it entirely from the list of eye washes.—*Canada Medical Journal.*

The Treatment of Cancer.—By hypodermic injections of acetic acid, as proposed by Dr. Broadbent, of London, is attracting considerable attention. The reasons given by Dr. B. for adopting this particular agent are:—

"1. This acid does not coagulate albumen, and might therefore be expected to diffuse itself throughout the tumour. The effect would not thus be limited to and concentrated in the part injected. 2. If it entered the circulation it could do no harm in any way, either by acting as a poison, or by inducing Embolism. 3. Acetic acid rapidly

dissolves the walls and modifies the nuclei of cells on the microscopic slide, and might be expected to do this when the cells were *in situ*. 4. It has been applied to open cancer and to cancerous ulcerations."

On experiment, it has been found to produce little pain when thrown into the malignant structure, although acting energetically upon its componen's. On the contrary, it produces when injected into the healthy tissue very considerable pain but very little apparent effect upon its ultimate structure.

Dr. B. suggests rather the use of a large quantity of dilute acid than a small quantity of that which is more concentrated. It should be thrown in slowly, and any subsequent pain may be readily controlled by the ether spray. At the present time, when the hypodermic syringe and the nebulizer are in the possession of every physician, this method of treatment of a fearful affection is worthy of extensive trial.

Practically in epithelial cancer of the integument or of the tongue there is difficulty in securing retention of the fluid—a little patience however will overcome this.

The strength of the solution may be varied from equal parts of the officinal strong acid and water, to one part of the former to four or five of the latter.

The Journal thinks that something more then local treatment is about always necessary in these cases. Arsenic is yet the king remedy, though another more potent is yet prayed for to dethrone it. Some profoundly acting *cell-changer* or *molecule-arranger* is demanded, or, better still, by-and-by we will find the cause and eradicate that.

In the common epithelial cancer or lupus, the Journal advises *persistent* exclusion of air and light from the diseased part especially by the Belladonna—a good strong extract constantly overlaying—and this does more, it allays pain directly, lessens molecular movement and cell change, impeding the flow of blood into the part just as it does, when taken internally, in the vessels of the spinal cord. The hypodermic use of the solution of atropine might induce some of these effects but would not alone exclude the air and the light which must continuously be done in order to secure success. Even without constitutional measures, this has wrought better results than any other of the thousand and one local applications proposed—the knife and the caustic not being overlooked in this estimate.

But the arsenic is imperative. Full but gradually *diminishing* doses five days in the week and two days for rest, and thus for weeks, or even months. In this manner the remedy can be used indefinitely without noxious, local, or general influence, and under the combined impression of this and the local application, the practitioner will, in an unexpectedly large proportion of cases, have the happiness of seeing the local disease gradually melt away, whilst all the time the general powers of the system will gain in vigour.

Cases which have resisted the knife or caustic may not be despaired of.

Howbeit, the vinegar remedy may have its own intrinsic sweetness worth the testing.—*Exchange.*

Urachus Pervious After Birth.—Dr. G. J. Townsend relates (*Boston Medical and Surgical Journal,*) the following case of this; "I was asked to see a little negro five days old, of mixed parentage and was told he was passing his water through his belly. On inspection, sure enough, every time the infant cried or made any great exertion, the urine bubbled freely from the umbilicus. The cord had separated normally, and the child was in every other respect vigorous and healthy. There was very evident ulceration of the surface, left by the separation of the cord. The question whether the urethra was pervious was solved at the time of the visit in the affirmative, a fair stream spirting forth *per vias naturales.*

"The presence of ulceration at the orifice of the abnormal duct rendered the process of obliterating it very simple. The ulcerated surface was freely cauterized, and the edges of the opening were brought into close apposition and kept there by a strip of adhesive plaster, firmly applied in a longitudinal direction. This was still further secured by a compress of cork covered with wash leather, and kept in place by being stitched to a close-fitting swathe.

"The presence of ulceration in this case may be thought to have some bearing upon the question as to the manner in which the cord separates, whether by a process of ulceration or absorption. But the ulceration was evidently an accident here, and caused by the acrid fluid passing constantly over a new and delicate surface, and was healed at once by the arrest of the flow.

"The patient was well in four days, when the swathe was removed.

"Cases of this kind are believed to be very rare, the urachus shriveling up in the human fœtus in the earlier stages of fœtal life."

New Surgical Bandage for Fractures.—The starch apparatus has long been a favourite application to fractures. For starch as a thickening and solidifying material, M. Velpeau has recently suggested soluble glass. It possesses many advantages over anything else yet used for the purpose. It is rigid, affording a much stronger supporter than any of its predecessors, is easily applied, and very neat and clean, it hardens in two or three hours, and can be readily removed by softening with water in which it is soluble at any temperature. It is now quite generally used, both in Europe and this Country. In Baltimore it is extensively made of uniform composition, as one of the ingredients in the manufacture of artificial stone, and every one who desires to use it can easily obtain it at a moderate price, and of any consistence they may desire.—*American Journal Dental Science.*

In the Mariana Florida Courier, we find the following account of an apparatus constructed by Dr. T. W. Hentz of that place, for which he deserves great credit.

Mr. Milton Mosely, of this County, was wounded during the war in

his face, carrying away his entire upper lip, and nearly his entire nose; his palate was cleft its whole length and all his front teeth carried away, making his appearance as unseemly as possible, and interfering with his speech and respiration, to such an extent as to be extremely annoying. Dr. Hentz made for him a palate and teeth, an india rubber nose, supported at the base by wires attached to the plate, and at its upper extremity by a pair of spectacles. Also attached a moustache to the upper lip, thus converting Mr. Mosely into quite a handsome man. His difficulty in speaking is removed, and the appliance, unless by close inspection, cannot be distinguished from a natural nose and palate. This ingenious contrivance can be removed and put back at pleasure.—*American Jour. of Dental Science.*

Case of Menstruation in the Male.—In the month of December, 1855, while attending the medical lectures of the University of Louisiana, I formed the accquaintance of a young gentleman, who was then a student in the same school. His character and attainments were such as to commend themselves to my admiration, which subsequently ripened into friendship and intimacy.

On one occasion, in a moment of extreme melancholy, and under the influence of the confidential relations existing between us, he communicated to me, that though not possessed of the usual organs, he periodically performed the simulated functions of menstruation; and that this deviation from the laws of nature, in his person, was not only inexplicable, but the source of the most painful and gloomy reflections. I enjoyed peculiar opportunities of observation, which were faithfully improved. He had been the victim of this vicarious function for a period of three years, eliminating an apparent catamenial secretion, with the same regularity, and attended by the same indications by which it is characterized in the human female.

The fluid exuded, flowed from the sebaceous glands of the deep fossa behind the corona glandis, and was of a sanguineous appearance, homogeneous and thick. The quantity of this exudation varied from one to two ounces during each hæmorrhagic period, and the duration of the periods from three to six days. The subject was then about twenty-two years of age, of a lymphatic temperament, and had never been contaminated by venereal disease. Though not prone to the indulgence of lustful passions, he was not innocent of having sometimes yielded to their promptings, which were especially potent immediately preceding his periodical purifications. I was made the sole repository of this gentleman's gloomy secret, and have not been heretofore permitted to divulge it; and even now the injunction of silence is but partly removed.

Medical literature abounds with the recital of strange and unaccountable departures from the boundaries, to which Nature has restricted this and kindred functions. The mammary gland in man, though only rudimentary in structure and conformation, has been known to rival its congener in woman, developing lobes, vesicles, excretory ducts, and areolar tissue. Its lactiferous function has been perfected,

under certain auspices, to such a degree as to yield its peculiar nourishment for an indefinite time. Women have been known to menstruate through unusual channels, and at unusual times—the anus, the mouth, the nose, the ears, ulcerated surfaces, and the very pores of the skin have been made tributary to this sexual function. Females have menstruated during pregnancy, during lactation, in old age, and even in the tender years of infancy; while others, in the vigour of life and in robust health have never menstruated at all.

But this case, so analagous in all its features to the catamenial phenomenon, has no parallel that has fallen under my notice, and I believe stands alone in point of its wide divergence from Nature.

Hoping that the subject matter of this paper may awaken inquiry and perhaps arouse intelligent discussion, or that it may elicit the publication of similar phenomena, I have the honour to be, very respectfully, V. O. K., M. D.—*Canada Med. Journal.*

We have been much interested in examining a vegetable curiosity which was laid upon our table a few days since, and which has been utilized as a barometer by an enterprising gentleman in Kentucky. The plant, of which it is the seed vessel, is said to grow in the deserts of Arabia, though we have not been able to find a botanical notice of it in any of the works to which we have access. It evidently belongs to the Natural Order Geraniaceæ, or one very nearly allied to it. In Germany it is known by the name of "storm plant." The seed vessel consists of a slender, fusiform capsule, which contains the two seeds; from the summit extends a slender appendage about two inches in length, fringed upon the external surface with stiff, coarse hairs.—Near the seed vessel this awn is coiled spirally upon itself with four or five complete turns, and in this lies its value as an hygrometer. Upon wetting it thoroughly it uncoils, and becomes nearly straight, and drying again, resumes its contorted form. Even the moisture of the breath is sufficient to effect it visibly. This property is also possessed in a less degree by the animated oat and several other plants. Microscopic examination shews the cause of this singular property to lie in the arrangement of the fibres of which the awn is composed. These fibres seem to extend individually throughout the entire length of the awn, and lie crowded together and slightly connected by delicate cellular tissue. Along the external surface of the coils, the fibres are apparently denser and more closely packed, and become gradually more and more transparent and porous as they approach the opposite side, until the inner layer is of very loose texture. In this we find a plain explanation of the whole phenomenon, and the reason why prolonged maceration in powerful chemical reagents does not destroy the power of coiling and again straightening, since it is purely mechanical, and depends wholly upon the different degree of contraction which takes place in the dense outer and spongy inner layer of fibres, in the latter so far predominating over the former as to draw the whole structure into a circular form. It also gives permanence to this function, and

we may suppose that a weather indicator constructed of this material will retain its activity indefinitely.

While the instrument is not sufficiently delicate for scientific investigations, it will be found very convenient for the use of farmers or private families, and it seems to show changes in the humidity of the atmosphere with great certainty, and the approach of rain or fair weather for many hours before it is apparent to the eye.—*Exchange.*

The Anatomy of the Gorilla.—The variation in the size of the brain is considerable in the human species, but I think the position and the quality of the brain have more to do with the intellectual manifestation in man than the size, although the intelligence is visibly altered according to the weight of the cerebral deposit. The cranial capacity of a young gorilla about a year or two old is from twenty to twenty-two cubic inches. Supposing a subsequent development equal to that in man, this would produce an animal of high grade of intelligence, but it is only the bones of the skull that increase in the gorilla, as it grows in years, not the brain itself, which remains about the same in the adult specimen as in the infant young. This proves conclusively that the animal has very small power of intelligence, and from my own experience I believe the limit of that intelligence is reached within a a year or two after the birth of the young gorilla. In the Caucasian skull the average capacity of the brain is about ninety cubic inches, and the maximum has been found to be one hundred and fourteen inches. In man the position of the head and the curvature of the vertebra column make the erect position the only natural one, any other being quite painful after a while. This difference is an organic one, resulting not from habit, but from natural structure. The whole frame of man proclaims that he was made to carry himself in an erect posture; and, unlike the quadrumanous apes, his superior extremities do not perform any service in the act of locomotion. Then comes the head, too, with its enormous expansion of brain; the condyles of the occiput are brought forward to the base of the skull, and by this balance of the head on the neck bone, the arms in man are in more symmetrical proportion with the length of the legs. The lower limbs, or legs, are longer than in apes, the pelvis is broader than it is long, the iliac bones inclined steeply, the humerus is larger than the fore-arm, and, finally, the thumb of man is much larger than in any ape, and the most useful member of the hand. According to Dr. Gratiolet, of Paris, even in the lowest idiots the brain presents the material and zoological character of man, and, although often inferior in appearance to that of the chimpanzee or other apes, it is nevertheless an undeniable human brain. Disease or degradation in continued reproduction may dwarf a man but will never make him an ape. Although there is great dissimilarity between the long frame of man and that of the gorilla, there is also an awful likeness, which in the latter resembles a hideous caricature of a human being.—*M. Paul du Chaillu.*

What Female Medical Students are capable of.—We find the following remarkable statements in a communication to the Philadelphia "Medical and Surgical Reporter" from Dr. J. W. Sherry, of Brooklyn, N. Y., on "The Status of Women Physicians:—"

Some twenty young ladies presented themselves at a clinic and lecture in one of the New York hospitals. The surgeon announced that the subject would be *Hernia;* and, not wishing to shock the delicacy of the fair auditors, he suggested the propriety of their withdrawal. Several hundred young men were present, and he thought it unfitting that the young ladies should remain. They did not retire, but occupied the nearest seat, while eighteen male patients, were exhibited, necessarily in a state of nudity!

At another hospital, lithotomy was to be performed on a man.—Eight members of "the little band of true-hearted women, just entering the medical profession," appeared to witness it. The surgeon from motives of delicacy, asked them to retire, and he sat down to await the result. But they moved not. He thereupon announced that if they did not withdraw, the operation would be postponed, or done privately. Then, they left.

The writer remarks, in another part of his letter:—

One would think that the ordeal through which a woman has to pass, who studies all the branches of medical science along with men, witnesses all operations in the presence of large numbers of men, studies her anatomy over the stinking, decaying, mutilated cadaver, in company with men, would be enough to make any right-minded woman recoil with a shudder at the mere mention of such a career for her. If the communities whose "moral sense" commends this "revolution," knew the details of this horrible curriculum for a woman, there is not a decent family in the land into which the admission of a woman who had passed through it, would not be, at least, prejudiced. Many would close their doors against her.

Leavenworth Medical Herald.—We have received the first numbers of a monthly medical journal bearing this title, published in Leavenworth, Kansas, and edited by C. A. Logan, M. D., and T. Sinks, M. D. The "Herald" is well printed, and the specimens before us contain a number of excellent articles, in addition to the usual miscellaneous matter which goes to make up a medical journal. It makes a very creditable appearance, and the Editors have our best wishes for its success.

The Preservation of Sulphate of Iron.—Signor Pavisi recommends the following method of preserving sulphate of iron

from oxidation. Mix four parts of pure crystallized sulphate of iron, and an equal quantity of finely powdered gum arabic, with distilled water, and evaporate the solution in a water bath, at a low heat, till it has a sufficient consistency to be poured out on plates of glass. When it has been poured out in this way, and allowed to dry at a temperature of 30° cent. in the dark, it may be cut up into lozenges, which can be kept for any length of time in a coloured stoppered bottle. A further account of this method is published in the *Tijdschrift voor Wetenschappelijke Pharm.*—*London Lancet.*

Extraordinary Obesity.—A woman named Hogan, wife of a comfortable farmer living at Kilmastulla, Ireland, died recently from obesity. Mrs. Hogan, in her youth, showed symptoms of attaining more than ordinary proportions, and she continued to increase in size until, at the time of her death, she had reached the extraordinary weight of forty-eight stone (672 pounds)! She was, for the last few years of her life, scarcely able to walk, and for some time past entirely confined to her bed.

Blood Corpuscles.—Different opinions have been expressed by recent microscopical observers upon the constitution of these bodies. Thus Ofsiannikof says that they possess an investing membrane or proper cell-wall, which reäcts differently from the contents. He has observed that crystallization occasionally occurs in the corpuscles while still floating in their own serum, and thinks that many of the changes in form, attributed to the influence of certain reägents, really occur within the corpuscles.

Schultze, however, examining blood which was kept on a peculiar slide at its own temperature, comes to the conclusion that the corpuscles are destitute of investing membrane. Of white corpuscles, he found some smaller than the red ones, some of equal size, and the rest of the typical form. These last exhibited lively and vigorous movements. He believes them too to be destitute of an investing membrane. Their movements cease after two or three hour's exposure to a heat of 100° F. Above this point they soon die, but keep active for twenty hours at 32°.

The red corpuscles exhibit no movement, but when heated to 125° they changed form, becoming indented at the margins, and then detaching rounded fragments, at first with pedicle. At last only minute bodies remained in the blood liquid, the largest being always smaller than unaltered blood-discs and the smallest quite minute granules. He found always small spherical blood-globules, the number of which varied according to the hour of the day, and

the significance of which remains undetermined. In violent fevers, the blood-discs always have a tendency to become globular.—*Amer. Jour. Dental Science.*

A Miniature Volcano.—Prof. Choutard, filling the chair of Natural Philosophy at Nancy, France, has devised the following experiment, showing the power of Ruhmkorff's induction coil. A quantity of the flowers of sulphur is mixed with a small proportion of iron filings, or, better still, with iron reduced by hydrogen, in which case it is in quite an impalpable state; zinc and copper filings may also be added in small quantities. The mixture, made as complete as possible, is placed on a pane of glass or a dry brick, so as to form a heap two or three centimetres high, and much longer than broad. The ends of the wires of a Ruhmkorff apparatus are inserted into the heap, so as to be two or three centimetres distant from each other. When ready, a current of electricity is sent through the coil, and instantly a violent explosion takes place. A sort of crater is formed, whence magnificent sheaves of fire are seen to issue, displaying colours like a bouquet of fireworks. It is in reality a volcano on a very small scale, having its subterranean noises, as it were, and ejecting boiling lava.

Cheap Lecture Diagrams.—Prof. Kick, of the Prague Polytechnic Institute, proposes the following way of preparing inexpensive diagram boards for lecture-room purposes. A sheet of stout brown paper is first coated with thin glue, in which is mixed a quantity of lampblack and powdered pumice stone. After the application of two coats of this composition, the design is traced with French chalk, the lines afterward to be gone over with ordinary chalk or coloured crayons. To fix the drawing, the inventor, by means of a "vaporizer," or spray apparatus, projects water in a finely-divided state over each line; the glue is thus softened, and allows the chalk to sink into it, and when dry forms a protecting varnish. Diagrams so prepared can be rolled up and rubbed without damage, and corrections may be made with great facility.

Explanation of the Favourable Effect of Iridectomy in Acute Glaucoma, by Fano.—It is generally accepted that glaucoma is an irido-choroiditis, with hypersecretion of the fluids of the eye, by means of which latter a compression of the retina with consecutive anæsthesia of this membrane occurs. The excision of a piece of iris is said, by diminishing the secreting surface, to relax the tension and restore the normal pressure. In opposing

this view, the author calls attention to the changes in the vitreous in the beginning of acute glaucoma, which become a physical hindrance to vision. An acute œdema of the conjunctiva is also observed in some cases, which indicates disturbance in the venous system. The vitreous, having no vessels, is nourished by imbibition from the arteries of the choroid, of the ciliary processes and of the retina, and the diminished transparency of these parts shows a change in the circulation of the vessels. If we consider, now, the rapid appearance of this symptom, with the coincidence of severe pain, as is observed in senile gangrene, may we not consider glaucoma as an inflammation of the arterial system of the eye? Iridectomy always (?) causes a hæmorrhage into the anterior chamber, whereby a direct depletion of the inflamed vessels occurs.—This may be the proper explanation for the favourable result from iridectomy.—*L' Union Médicale, Memorabilien Heilbronn.*

Indolent Ulcers, by D. A. Morse, M. D.—The most satisfactory mode of treatment for an Indolent Ulcer, around which the tissues are indurated and the surface black, with considerable congestion, is to fill the excavation with a powder composed of—as a a whole—ten parts: seven of acet. plumbi, one of pulv. opii, two of calomel. Morphine may be substituted for opium. This, while it excites proper action in the parts, relieves pain, unloads the vessels, and will sometimes change the colour of surrounding parts, in twenty-four hours, to a bright red. In varicose ulcers the lead has a good effect upon the dilated vessels. Apply adhesive plaster to the limb that the pressure may aid in relieving congestion. The straps will depress elevated edges. The ulcer will heal kindly.

Influence of Condensation of Population on Life.—The Boston correspondent of the New York *Evening Post*, says that Dr. Edward Jarvis, of Dorchester, recently read a paper on the effect of Condensation of Population on Life, from which it appears that it is extremely rare to find a citizen of Paris with many generations of Parisians among his progenitors. London needs ten thousand recruits from the country every year to keep its numbers good. There is a much larger proportion of deaths by zymotic and nervous diseases in the city than in the country, while the proportion of deaths by old age is thirty-seven per cent. larger than in the city. The mortality of children is much larger in cities than in the country—the excess of deaths of children under five years in English towns and cities from 1851 to 1860, being one hundred and fifty-two per cent. over the population prevailing in the country. Much of this excessive mortality is attributable to destitution

and privation; the dangerous occupations and protracted labours of many of the inhabitants of cities; the compactness, narrowness and crookedness of the streets, leaving little chance for the circulation of air; and the extreme mental exertion and undue expenditure of the vital powers by the better classes. In so far as the causes could be removed the rate of mortality will be lessened.—Sanitary improvements in nineteen towns and cities of Great Britain had reduced the rate of mortality from twenty-eight in one thousand to twenty-one in one thousand. In Liverpool the decrease was thirty per cent.—*Philadelphia Reporter.*

Sewing Machines.—Dr. Down, of the Redhill asylum for idiots, has recently read a paper upon the detrimental action of these machines upon the health of those who habitually use them. At his hospital in London, his patients who had been constantly employed in working sewing machines, suffered from pallor, lassitude, pain in the back and leucorrhea. Some of them became conscious of the injury they were receiving, from observation of their own symptoms, and abandoned an occupation manifestly detrimental. These ill effects attend the use of the large, heavy machines worked with both feet. The lighter apparatus worked by a single treadle is not so injurious.—*Amer. Jour. Dental Science.*

A young lady of St. Louis has been suffering for several years past from symptoms of mercurial poisoning. For a long time no cause could be ascertained, but a dentist finding that she had her teeth filled with mercurial amalgam, came to the conclusion that the chlorine contained in her saliva might have generated corrosive sublimate. He therefore removed the amalgam and put in gold.—She has since recovered her health.—*Phila. Reporter.*

I have used quite a number of remedies for itch—nearly all with success; because formed with reference to the true cause of the disease. I have used a formula of my own similar to that of Hebra, of Vienna. I have used that of Bourgignone, of Belgium, erroneously ascribed by some to Nichols of the British army, in which he used it indeed with most satisfactory results. And although, as stated by several authorities, it will cure many cases in half an hour, I usually direct the prescription of Helmerich as perfected by M. Hardy, of Paris. Rub the patient half an hour with soft soap; then put him in a warm bath and rub him well for an hour, to break up the burrows and remove the deadened cuticle; lastly, rub in well for half an hour an ointment made by mixing together two parts sulphur, one part carbonate potash, and eight

parts lard. A single application will thus in two hours cure perfectly ninety-nine per cent. of all cases, however bad. If any point should escape, a second application to that part alone will effect a final cure.

Sulphur produces itself an eruption on the skin of many persons; and I have seen practitioners after having cured scabies, continue applying sulphur; thus for weeks and even months keeping up a cutaneous irritation little less distressing than the original disease, which they supposed they were still treating.

When carbonate of potash could not be obtained, I have supplied its place in the above formula with the bicarbonate, or other substance, to act mechanically in breaking up or opening any burrows that may have escaped the previous rubbings.—*Phila. Reporter.*

A Sentiment by Dr. Holmes.—At the late meeting of the Massachusetts Medical Society, Dr. O. W. Holmes made some remarks in reference to a charge that in his writings he drew all his villains from the clerical and legal professions, he said:

"I am afraid I shall have to square accounts by writing one more story, with a wicked physician figuring in it. I have long been looking in vain for such a one to serve as a model. I thought I had found a very excellent villain at one time, but it turned out that he was no physician at all, only a ——— I mean not what we consider a practitioner of medicine.

"I will venture to propose a sentiment which, as I am not a working physician, need not include the proposer in its eulogy:

"The Medical Profession—so full of good people that its own story tellers have to go outside of it to find their villains."

Microscopes in the French Exposition.—A correspondent of the New York *Evening Post*, writing from Paris, says:

"London, Paris and Liverpool rival each other in the beauty and wonderful power of their microscopes. M. Vachet, one of the most celebrated makers in Paris, exhibits a great variety. In the principal model the body of the instrument inclines on its axis; the adjustment of the focus is effected at first by a coarse rapid screw, then corrected by the micrometric screw; the platform, covered with blackened glass, possesses a convenient movement of rotation; the mirror, plain on one face, concave on the other, is articulated; there is a slide to receive the diaphragms, &c. The binocular microscope, constructed on new principles, gives stereoscopic images; by looking with both eyes at once, one obtains magnificent objects in relief. There is also a three-bodied microscope, destined for zoological studies, and adapted for the observations of fugitive

objects by several persons at one time. M. Vachet also exhibits a series of eight lentilles for objectives, whose magnifying power varies from twenty-five to one thousand five hundred diameters.— The most powerful lentil is almost imperceptible.

"From England three principal makers rival each other in combinations and richness of construction. Ross, who sends four models of extraordinary proportions, dazzling with perfections; Beck, who makes a specialty of the binocular-stereoscopic microscope; Dallemeyer, renowned for the quality of his photographic objectives."

MEDICAL "VENDETTA" IN ITALY.—A very startling trial has recently been concluded in Milan. It appeared from the evidence, that M. Feltrinelli, a parish doctor, had been ousted from a village near Brescia, and his place taken by a professional brother named Salvetti. The latter settled in the place with his pregnant wife, his sister, and four children. A girl, named Bertolotti, soon afterwards, entered M. Salvetti's service as general servant, and exhibited, after a while, very strange manners. She used to stay away for hours, and then return exhausted and tired out, as if she had travelled a long distance; but these peculiarities were looked over, as she was besides extremely useful in the house. The children, however, met successively with strange mishaps. One vomited pins and needles, a second almost perished, poisoned by some copper preparation, a third was three times on the point of drowning in the Lake of Garda, and the other was taken seriously ill. Dr. Salvetti now repented having come to this village, and heard, at the same time, that his servant was on intimate terms with Feltrinelli, and frequently visited him. Thereupon the girl was examined, and she confessed that, at the instigation of a woman named Codogni, she had criminally yielded to Feltrinelli, and that the latter had offered her a reward to destroy Salvetti's four children. She added, that her paramour had given her very minute instructions as to the mode of carrying out the design. She had thus made one swallow pins; to a second she had given petroleum and sulphate of copper; she had tried to drown a third child, and to stifle a fourth. Nay, she had even been told how to destroy the child of which poor Salvetti's wife was pregnant. Thereupon Feltrinelli, the woman Codogni, and the servant Certolotti, were tried at Brescia, and sent to the galleys. Feltrinelli, however, obtained, on a technical flaw, a new trial at Milan, and was acquitted; but the verdict against the woman was confirmed. It is but due to Feltrinelli to state, that he most emphatically denied the horrid deeds with which he was charged.—*London Lancet.*

THE SLEEPING GIRL AT HICKMAN, KY. A PHYSICIAN'S OPINION.—We find in the Hickman, Ky., *Courier* the following letter in regard to the strange case which has already been noticed by the press:

At your request I will give some of the particulars of the sleeping wonder, Miss Susan C. Godsa. I visited her for the first time on the 27th of June last. First, she is always in motion (something like sleeping-shaking palsy). She awoke a few minutes after our arrival, and remained so eight minutes, during which time she took a mouthful of refreshments. She said nothing, unless it was in answer to such questions as were put to her by some one of our party, which she did with sufficient clearness. Her physical development is good enough; complexion sallow; hair black; head large and well developed. The other parts of her body are not so well developed; her hands and feet are very small; she is of medium height. While I was putting questions to her she went to sleep in the twinkling of an eye, and slept two hours and fifteen minutes; then awoke in a kind of convulsion. She is not aware of any misery or pain while asleep, and has no dreams; if she has, does not remember them; in short, is totally dead to all sensations of pain or pleasure while asleep. When awake she is always in great pain, which she generally locates in her head, left side, and the small of her back; can't lie on her left side. I tried to count the pulse, but owing to the incessant motion of her arms I failed. Could hardly discover the pulse. When she again went to sleep she lay in this shaking condition three minutes; then commenced to rotate her head and face from one side to the other in a very violent manner. This lasted three-quarters of a minute, then became quiet as before, and lay two and a half minutes. Then commenced to hiccup at every respiration, raising her head a little at each hiccup, till her chin was brought down to her collar bone, a little to the left of the median line. Then her neck became limber, and her head instantly fell back to the pillow. This lasted from a half to three-quarters of a minute. Then she would appear to cramp for a few seconds, and then she was as before. She kept up a continual series of the above described symptoms, alternating from one to another in regular succession for two hours and fifteen minutes, when she awoke, took some refreshments, answered questions as before, and in ten minutes was sound asleep, and continued her nervous motions as before. Miss Godsa has been diseased in this way for the last eighteen years. Ten years ago her symptoms became more aggravated, and have changed but little since. As I expect to prepare a full report of this remarkable case in detail soon, for the medical world, I will say nothing more.

W. D. CORBETT.

M. Follin.—The profession in Paris have not for a long time been so deeply grieved as when, very recently, it became known that this very promising surgeon had breathed his last, at the early age of forty-three. Paris, like London, has boasted for some years past of a phalanx of active, talented men, who, in contra-distinction to their elders, are looked upon as representative of Young Surgery. Broca, Verveuil, Le Fort, and the deceased were prominent members of this school in the French capital. Their labours and views comprised a more universal circle than their immediate masters had entered. The surgery of foreign countries was by these young, eminent and highly gifted men brought under discussion, and all really useful inventions and discoveries eloquently popularised among the profession of France. Foremost amongst these pioneers was the departed Follin, who made it especially his task to bring the ophthalmoscope before his country. He had lately been elected a member of the Academy of Medicine of Paris in the surgical section, and not once had the successful candidate the gratification of taking his seat amongst his colleagues.—*London Lancet.*

Cysticercus in the Brain.—Dr. John Harley brought forward an interesting case, in a pathological point of view, at the Medico-Chirurgical Society, illustrating the development of the larval form of the common tape-worm in the substance of the brain, about sixty cases of which are on record; the affection is, therefore, a rare one. The subject of the present case was a healthy boy, fifteen years old. He died of acute rheumatismal pericarditis and encephalitis after a week's illness. Only a solitary larva was found in the body, and this was imbedded in the right corpus striatum and slightly projecting into the ventricle. The cyst was no larger than a pea, and contained within its interior the retracted head and neck of the parasite. The species was distinguished by the large size of the great curvature and the strong bases of their hooklets, and by the development of dark violet pigment granules about the hook sacs. The boy had always enjcyed good health, and the only evidence of cerebral disorder was manifested during the last two months of his life. It consisted of frontal headache and an uncontrollable tendency to sleep—symptoms which were probably caused by the presence of the parasite.—*Ibid.*

Mr. Hoff and the New York Academy of Medicine.—At the last meeting of the Academy of Medicine, the following resolutions were unanimously adopted:

Whereas, W. L. Hoff, proprietor or agent of the "Hoff Malt Extract," is issuing publications through the secular papers, and

by means of pamphlets and circulars professing to quote favourable opinions expressed in a report of a committee of the Academy;

And, Whereas, the said Hoff is widely circulating a letter purporting to have been written by a Fellow of this Academy;

And, Whereas, the publications of said Hoff are so adroitly and designedly worded as to impress the mind of the reader with the belief that the Academy has endorsed his nostrum, and has thus apparently compromised its dignity and professional standing—Therefore,

Resolved, That the New York Academy of Medicine does hereby proclaim and declare that it has not expressed any opinion in regard to "Hoff's Malt Extract," and that any and every use of its name in recommending said Extract is unauthorized by the Academy.

Resolved, That a copy of the above preamble and resolutions be sent to the Medical journals of this city, and that the Medical journals throughout the country be requested to publish the same, in justice to the Academy and the profession.—*New York Med. Jour.*

Chloroform to the Dying.—Dr. Joseph Buller, physician to the Royal South Hants Infirmary, in an article with the above caption in the *British Medical Journal*, makes some interesting remarks upon the propriety of administering chloroform to the dying. The cases to which its use, in his opinion, seems applicable, are those in which there are extreme restlessness and sleeplessness, accompanying the exhaustion of the last days or weeks of the life of the very aged, especially when (as is often the case) the mental consciousness is still active, and the failure of power in the vital organs is actually felt, with none of that physicial courage to bear the suffering which the same patients had when younger and stronger. At this time opiates seem useless; in fact, efforts towards the alleviation of the distressing symptoms seem utterly futile without the anæsthetic. From some cases that he records as having come under his personal observation, it would seem that the chloroform properly regulated, acted as a nerve stimulant, quieting pain, but still not interfering with the process of intellection.—*Med. Record.*

The Great Salt Lake of Utah.—While in the Territory I visited that vast natural deposit of chloride of sodium, Salt Lake, and with several friends tried an experiment of bathing in it. We waded out from the shore until the water reached our arm-pits, when our feet were raised from the bottom and we remained suspended. The specific gravity of the water is so great that we were enabled to float upon the surface without moving hand or foot. We folded our arms and sat up in the lake, only to sinking near the arms, and

we floated about like corks. The sensation was most novel and peculiar.

The fact is, that the entire volume of the lake is a saturated solution of salt, the water being charged to its maximum capacity; and we were told that four buckets of water, made, when evaporated, one-fourth the volume of pure salt.

The wind was blowing quite fresh while we were in the lake, and the spray fell upon our heads and in our eyes, causing most acute pain. In a very few minutes after we came out of the water our bodies were encrusted with an armour of salt, and our hair was also frosted over with it, giving us the appearance of very great longevity. We felt exceedingly uncomfortable in this saline covering, and were puzzled as to how we should dispose of it, until some one suggested that we should go to a fresh water spring near by, and dissolve the salt, which we did. We did not see a fish or other living animal or reptile in the lake, and I doubt if animal life could be sustained there.

As is very generally known, this vast body of water (something like eighty by thirty miles in extent) receives several quite large fresh-water streams, but has no visible outlet.

Ever since it was first discovered it has been constantly contracting, and the water receding from the shores. The water of the Salt Lake has a greater specific gravity, and a greater amount of solid matter than any other known, with the exception of that of the Dead Sea.

One hundred parts of the water by weight were found to contain, after evaporation, 22.422 of solid matter, in which were the following constituents:

Chloride of Sodium, - - - -	20.196
Sulphate of Soda, - - - -	1.834
Chloride of Magnesium - - - -	0.252
	22.282

a trace of chloride of calcium; or within 2.298 of tbe amount of solid matter found in the water of the Dead Sea.—*Col. Marcy's Army Life on the Border.*

MM. Kussmaul and Maïer describe a new variety of arterial disease, characterised by circumscribed thickenings of the walls of vessels, commencing with an abundant proliferation of the cells of the middle coat. This *nodulated arteritis* and the muscular paralysis which accompanies it are altogether incurable. Its phenomena are the following:—1. A general paralysis occurs without known cause, and is developed rapidly, with fever, nephritis, and violent muscular pains. 2. This is accompanied by a nodulated peri-

arteritis, which, by interrupting circulation, causes alternate contractions and dilatations of the vessels. 3. The principle diagnostic signs are the rapid development of muscular palsy with loss of contractility and intense pain, the nephritis the arteritis, and the presence of small arterial nodosities under the skin. 4. When the disease affects the intestinal arteries extensively, it may cause the same changes in the mucous membrane as are produced by embolism. 5. The muscles undergo fatty degeneration, but as long as they have only partly lost contractility, they may recover. 6. In order to restore contractility, the application of induced, and still better, of constant, currents is desirable.—*Lancet.*

Coating of Pills.—There is much ingenuity wasted in the coating of pills. Our apothecaries have "swung round the circle," and revived an old and exploded practice of coating them with silver or tin. This is an abominable plan. Both chemistry and therapeutics are at war with it. Collodion protects the pill from solution in the stomach. Sugar and gum are the only legitimate materials. At best, however, there is but little use in coating pills. Any properly educated person can swallow an uncoated pill without tasting it. It comes natural to boys to swallow cherry stones, and everybody can take down grape seeds by the pound. Only by some trick or perversion of the apparatus of deglutition can difficulty arise, and this may be corrected by discipline. It is extremely unfortunate for a chronic patient to swallow pills. Some medicines can scarcely be administered in any other form, and many a dose, otherwise nauseous, may be smuggled into the stomach in this form, without awaking from slumber the gustatory sentinels. Parents should always see to it that their children do not grow up with the distressing trick of shutting down the gullet against a friendly pill.—*Pacific Med. and Surg. Jour.*

Hypodermic Injections.—M. Arnold, a military surgeon at Constantina (Algeria), lately published several cases of ague cured by hypodermic injections of sulphate of quinine. These cases have been commented upon by Professor Fonssagrives of Montpelier, who warns the Profession as to the possibility of tetanus being induced by such injections. The Professor mentions two cases—a child and an adult—who both died of traumatic tetanus after hypodermic injections of sulphate of quinine dissolved in water and a little sulphuric acid. Both patients were suffering from ague. A third case has been observed at New Orleans, in a young Swiss, who died of tetanus two months after having submitted to hopodermic injection for intermittent fever. The puncture, made over the deltoid, had turned into an ulcer.—*Lancet.*

MEDICAL NEWS.

"Nulla Dies, Sine Linea."

Dr. James Jackson, the oldest member of the medical profession in Boston, died on the 27th of August, in the ninetieth year of his age.

The cable announces the death of two men illustrious in science and Surgery—Professor Faraday, of England, and M. Velpeau, of France.

Maudsley, of London, Morel, of Paris, and Griesinger, of Berlin, have been appointed a Commission to examine into the mental condition of the Empress Carlotta.

A subscription has been started in Paris to raise a fund for a bust or full statue in marble, in memory of M. Trousseau, the distinguished physician, to be placed in the hall of the Faculty of Medicine.

The sad intelligence comes to us from abroad of the death of two of the brightest ornaments of our profession—Civiale and Trousseau—the former on the 11th, and the latter "after months of cruel suffering," on the 23d of June.

A New Medical Baron.—M. Cloquet, known to all Europe as one of the most celebrated of French Surgeons and Anatomists, has just been created a Baron. This reward, it is said, has not been granted to any physician or surgeon since it was conferred on Dupuytren.

The Empress Charlotte.—It is stated in the *Gazette de France* that the Medical attendants of the Empress Charlotte have declared, as the result of their consultation, that their unhappy patient will never recover her reason, and that her life will be one of very short duration.

Prof. W. W. Greene, of Pittsfield, Mass., has received the appointment of Professor of Surgery in the Michigan Medical University at Ann Arbor. Prof. Greene will retain his connection with the Berkshire Medical College at Pittsfield, and still make his residence in that town.

Meteorograph.—Among the objects of great interest to scientists in the Paris Exposition are the diagrams, made by the admirable instrument for registering automatically the changes in the temperature, pressure, moisture and motion of the atmosphere, invented by Father Secchi of the College of Rome.

The New York Ophthalmic Hospital.—The Directors of this institution have appointed a board of four attending surgeons, from the homœopathic ranks. They are Drs. Allen, Bacon, Wetmore and Leopold. The places were previously occupied by Drs. Stephenson, Carnochan, Holcombe and Ceccarini.

J. W. Mallet, Professor of Chemistry in the medical department of the University of New Orleans, has been elected to the Chair of Chemical Technology in the University of Virginia; and Prof. L. Borchi has been appointed Assistant Professor of Mathematics, to take charge of the School of Applied Mathematics.

Sir William Lawerence, F. R. S., the distinguished English surgeon, died of paralysis, on the 5th of July last, at the age of 84. Some three days after the honour of a title was conferred on him he had an attack of apoplexy, followed by hemiphlegia. From this he rallied so far as to be able to ride out and with assistance to walk a little, but he never recovered the power of speech.

Prize Question.—The Paris Hospital Medical Society offer as a subject for the Philips prize, 2000 francs in value, the following question: "Examine and demonstrate to what point tubercular meningitis may be cured and prevented, and what are the most fitting means for the attainment of these results." Essays in French to be sent to M. le. Dr. Lailler, Secretary, 22 Rue Caumartin, before April 1, 1870.

A new Method of Resuscitation from Hyperanæsthesia by Chloroform.—At a recent meeting of the New York Academy of Medicine, Dr. Worster read a case in which chloroform had been administered to a patient, by a party whom he regarded as competent, as a prepratory step to an operation, by himself, for the relief of hæmorrhoids. Suddenly the patient had stertorous breathing, became pulseless, and exhibited all the symptoms of a speedy dissolution; but by the simple expedient of reversing his position, and inclining his body to an angle of forty-five degrees, he was fully restored.—*N. Y. Med. Record.*

A patent has been granted to Dr. William D. Hooper, of Bedford county, Va., for a self-acting "cupping-glass," which does away with the sacrificator. About half an inch from the mouth of the glass there is a metallic plate filled with hollow lancets. On exhausting the glass by a pump, the skin is drawn up, perforated by these lancets, and the blood passes up through them above the plate. These lancets, remaining in the orifice, will prevent the coägulation of the blood, and being exceedingly keen at the point, will prevent all pain in the operation. It is thought that they can be made so as to be carried in a small pocket case, and to cost much less than the present instrument.—*Richmond Dispatch.*

Special Departments for Eye, Ear, and Skin, have been established at the London Hospital.

It is stated that nine Surgeons of the United States Army have recently died in Texas from yellow fever.

Four surgeons of the U. S. Volunteers are ordered to be honourably mustered out of the service. This leaves but one surgeon, U. S. V., in service.

"The Humboldt Medical Archives," a sixty page monthly Journal of medical sciences, edited by A. Hammer, M. D., and Montrose A. Pallen, M. D., with the Faculty of the Humboldt Medical College, St. Louis, Mo., as co-Editors, will be issued on the first of every month, beginning on the first day of September, 1867.

Death of M. Boudin.—The devotees to statistical and anthropological studies will much regret to hear of the death of this elaborate investigator. Occupying a high position in military medicine in France, and the author of a standard work on Medical Geography, his contributions to the various scientific and medical periodicals on every branch of statistics have been as numerous as valuable. We hope to be able shortly to furnish some accounts of his labours.—*N. Y. Med. Jour.*

Dr. Hjaltelin of Iceland.—Among the foreign visitors at present residing in London is Dr. Hjaltelin, of Iceland, who is already favourably known to the British medical public by several scientific communications, translations of which have appeared in some of our medical journals. Dr. Hjaltelin is a native of Iceland, but he received his medical education in Denmark, to which the island belongs, and in Germany. One of the objects of Dr. Hjaltelin's visit to this country is to exhibit to the profession some specimens of cod-liver oil, prepared under his superintendence from the livers of the Icelandic cod, the fish being said to attain a very high degree of development in that hyperborean region.—*Brit. Med. Journal.*

Prof. Billroth.—After a long discussion over the various candidates, Professor Billroth, of Zurich, had been called to the chair of Surgery in the Vienna University, made vacant by the death of Prof. Schuh. The *Medicinische Zeitung* remarks that there is but one voice as to the propriety of choice. Before called to Zurich, Professor Billroth was an assistant to the famous Langenbeck in Berlin. He has written a work on Surgical Pathology and Therapeutics, which has reached a second edition. Pitha, Dumreicher, Patruban, Ulrich, Dittl, and Lorinser, together with the last acquisition, are now the surgical teachers in Vienna, who assist in maintaining the glory of that medical school which has so long enjoyed the highest reputation. There is perhaps no place in Europe where so many advantages are brought together for medical study as in Vienna.

EDITORIAL.

"Nullius Addictus Jurare in Verba Magistri."—Hor.

From the earliest dawn of history, mankind have always sought the recuperation of injured health, at the healing waters of their respective Countries. Sacred writers have embalmed the virtues of Siloam and Bethesda, at which the diseased and crippled offered up fervent thanks for the mystic agencies which had brought to them a long coveted rest.

In long past and forgotten days, when the Roman represented all the magnificence of pomp and power, the luxurious patricians of Italy, jostled their plebeian imitators at the classic baths of Baiæ and Lucca.

In more modern times, helpless invalids are in turn amused or outraged, by the motley frequenters of German Spas, where the uneasy sleep of the sick is disturbed by the noise and ribaldry of disorderly rioters.

In England, the dignity of the nobility and the sober decorum of the middle classes, give attraction to wells and springs, whose names are "as familiar as household words." Nowhere, however, are these waters more celebrated and more frequented than in America, and nowhere in America are they more efficacious, than in the mountains of Virginia.

In this Country, as in all others, there are thousands of invalids whose hearts have often been made sick, by the repeated destruction of hope long deferred; who, like the Thane of Cawdor, have lost faith in drugs, and seek to find balm for the despondent spirit, and rest for the weary body, in the healing influences of mountain waters.

There are few American Physicians to whom information on this subject can be unwelcome, and, as their advice is frequently asked, it is proposed to offer some aid in their decisions.

Among the most celebrated of the Virginia Springs, are those found West of the Blue Ridge Mountains. In approaching them, Staunton, a prosperous Town, on the Central Railroad, becomes a

point of interest and importance, as from this place cars and stages leave daily for the various mineral springs, throughout that portion of the State. In going to the Springs, no one will regret passing a portion of his time in the Town just mentioned.

Nestled in a valley, formed by picturesque hills, from the tops of which all that is grand and varied in scenery, can fully be enjoyed, Staunton has had conferred upon her, by Nature, those attractive surroundings, accepted as chief among the essentials of physical beauty and graceful adornment. Its dry, pure and bracing air, must be felt to be appreciated, and these enjoyments are welcomely enhanced, by the kind and true hospitality, which is uniform and inexhaustible.

At this place, the traveller obtains all the necessary information relative to the Springs to be visited.

It is not intended that any description of the physical or social attractions of these Springs should be given here. In the main, the views, etc., are similar to all of that mountain scenery, among which these Springs bubble from the earth, and the social amusements differ, in no material respect, from those observed at all watering places.

The course adopted is to give, with the previous information, a reliable analysis of each important Spring, assuming that from such materials, the Physician will usually be enabled to select for his patients, the waters most appropriate for their physical ailments.

Nearest to Staunton, (not more than fourteen miles,) are the Augusta or Stribling Springs, which, though not as well known as some others, must in time, become fully equal to those which have long been most valued and esteemed.

There are several Springs at this spot, the Sulphur, Alum and Chalybeate. By Prof. Campbell's analysis, the Sulphur Spring gives the following results:

Carbonic acid gas	8·250 cubic inches	3·899	grains.
Sulph. hydrogen gas	2·470 " "	0.912	"
Sulphate of potassa		0·441	"
" of soda		0·812	"
Chloride of sodium		0·610	"

Carbonate of soda	1·203	grains.
" of lime	5·517	"
" of magnesia	3·864	"
Phosphate of lime	0·002	"
Silicate of soda	0·253	"
Organic matter	1·229	"
	18.772	"

The Alum Spring (by the same authority) furnishes the following proportions:

Sulphate of iron	12·125	grains.
Tersulphate of Alumina	16·675	"
Sulphate of potassa	1·324	"
" of lime	6·877	"
" of magnesia	3·371	"
Chloride of sodium	0·640	"
Crenate of ammonia	0·630	"
Silica	1·550	"
Free Sulphuric acid	9·092	"
Carbonic acid gas	3·575	"
	55·859	"

The Chalybeate properties of this water are marked and important.

Travellers to the Rockbridge Alum Springs take the cars from Staunton as far as Goshen, where they are met by stages. An analysis of this Spring gives the following results:

Sulphate of potash	1·765	grains.
" of lime	3·263	"
" of magnesia	1.763	"
Protoxide of iron	4·863	"
Alumina	17·905	"
Crenate of ammonia	0·700	"
Chloride of sodium	1·800	"
Silicic acid	2·840	"
Free Sulphuric acid	15·224	"

Carbonic acid.....7·356 grains.

56·687 "

Pure water.....58315·313

58372·000

The White Sulphur Springs have enjoyed a reputation inferior to none in America. They are situated sixty miles west of Staunton. Cars run to Covington, and passengers there take the stage to the end of the journey.

The analysis of its water is as follows (Prof. W. B. Rogers):

Sulphate of lime.....31·680 grains.
" of magnesia.....8·241 "
" of soda.....4.050 "
Carbonate of lime.....1·530 "
" of magnesia.....0·506 "
Chloride of magnesium.....0·071 "
" of calcium.....0·010 "
" of sodium.....0.226 "
Proto-sulphate of iron.....0·069 "
Sulphate of alumina.....0·012 "
Earthy phosphates.....a trace
Azotized organic matter blended with a large proportion of sulphur, about..... 5 "
Iodine, combined with sodium or magnesium.

Volume of each of the gases, in a free state, contained 100 cubic inches, (3½ pints.)

Sulphuretted hydrogen.....0·66 to 1·30 cubic inches.
Nitrogen.....1·88
Oxygen.....0·19
Carbonic acid.....3.67

Seventeen miles Southeast are the Sweet Springs. The water is thus analyzed—

Sulphate of lime.....5·703 grains.
" of magnesia.....4·067 "
" of soda.....2·746 "
Carbonate of lime.....13·013 "

Chloride of sodium	0·060 grains.
" of magnesium	0·136 "
" of calcium	0·065 "
Peroxide of iron (Sesquioxide,)	0·061 "
Silica	0·075 "
Earthy phosphate	a trace.

The Red Sweet is only one mile distant on the White Sulphur road. Its waters have been twice analyzed. One quart contains

Carbonate of lime	4 grains.
" of magnesia	3 "
" of iron	2 "
Silex	1 "
Sulphate of magnesia	1 "
Muriate of soda	½ "
Iron combined	1 "
Carbonic acid.	

This subject will be continued in future numbers, with brief remarks in regard to the chief diseases that are conspicuously mitigated, if not removed, at specified Springs.

Note.—The analyses are taken from a work, published by Dr. J. J. Moorman, for which proper acknowledgment is cheerfully made. This work contains much useful and interesting matter in regard to all of the Springs in the United States and Canada. Those who desire information in this connection will find this volume a valuable aid.

NOTICES.

☞ The Editors of this Journal, after fairly trying a liberal policy, for the convenience of many whom the late war left without pecuniary resources, have determined to adopt a complete and permanent change.

Letters, in all respects polite, have been written to very many who had entirely neglected the liquidation of their accounts; to the writer of these letters, there has seldom been manifested the ordinary courtesy of a reply; yet such gentlemen have continued to receive the Journals sent to them. Such a course needs no

comment, and each subscriber knows to whom the charges of injustice, discourtesy and illiberality are applicable. The Editors trust that these charges will be appropriately applied.

The credit system, under such circumstances, is therefore abandoned. Apart from its risks, which may be successfully borne, it entails an enormous correspondence upon the Editors, and this painful, expensive, and often futile labour, will no longer be performed.

Notice is then given, that no number of this (the fourth) volume, or of any future volume, will be furnished to any one, unless the amount of subscription is sent with the order. When the period of any subscription terminates, the Journal will be discontinued, unless the amount due for its continuance, is punctually forwarded.

The Journal will be discontinued to all who are in arrears, after the September number of the present year, and for the protection of the Editors, all means practicable will be instituted, for the collection of the amounts respectively due.

The special arrangements made with a few gentlemen, for this year, will, of course, be respected, and to them the Journal will be continued for the year; though it is asked, that, if possible, the the amounts due be forwarded.

The fact that the number who pay promptly is sufficient to fully sustain the Journal, when it is not sent to unremunerative subscribers, and the unsatisfactory experience in regard to those who do not appreciate a credit extended to them, induce the Editors to adopt this course. All in arrears are respectfully asked to liquidate their accounts, long since due.

To all, the Journal will hereafter be furnished, only on the terms specified.

☞ The French letter has been temporarily discontinued, as the writer of it, an American Physician of much promise, and a private pupil of Velpeau, desires to devote all practicable leisure to his preparation for examination in the Paris Schools of Medicine.—This letter will soon be resumed.

☞ All gentlemen whose letters require a reply, are respectfully requested to enclose a stamp. This stamp is but a small expense to the writer of the letter, while the very heavy correspondence which has been developed with the Journal Office, makes the cost of stamps a serious tax. This usual request has long been postponed. It is now made with reluctance, and it is hoped that all correspondents will recollect it.

☞ Mr. E. Steiger, No. 17 N. William Street, New York, has on hand the most valuable of German Medical Works. Catalogues and lists prepared by him may be had gratis upon application.

☞ A slight error is implied in a former notice. Dr. Theophilus Parvin was one of the original projectors of the Cincinnati Journal, and at that time resided in that City. He has been diligently working at it until its removal and change of name, when it passed solely into his hands.

☞ After this number, the Journal will no longer be sent to those who have failed to pay their subscription accounts.

☞ Short Articles.—It is requested, that articles contributed for this Work, should be brief and practical. With few exceptions, long communications are distasteful to readers and are generally neglected; it is difficult to make room for them. Papers of merit are retained for many months, when, if the valuable truths contained were briefly presented, they would be promptly published. It is the desire of the Editors of this Journal to increase, relatively, the Eclectic Department, and, to effect this, original papers of limited extent are preferable.

☞ Where manuscript is sent to the Editors of this Journal, all writers are respectfully requested to state whether remuneration is desired.

There is such a difference in the intention of those writing for this Work, that it is necessary to make this request.

☞ Notices to Subscribers, Advertisers, Contributors and Correspondents.

Receipts for all amounts transmitted, will be sent in the Journal, for the succeeding month. It is desired to obtain for this Journal one Agent in every City and Town.]

All communications sent by mail should be directed to Dr. E. S. Gaillard, Locked-Box 32 Richmond, Va.

European packages, sent through Trubner & Co., 60 Paternoster Row, London, or J. B. Bailliere et Fils, Rue Hauterfeuille, Paris, will be safely forwarded.

It is expected that all expenses will be paid on packages, foreign and domestic, sent to this Journal.

Contributions for publication must bear the signature of the writer, and must be communicated to this Journal exclusively.

Original articles should be written on one side only of each sheet, and the manuscript should be, by the sign (¶), divided into paragraphs.

Contributors can have forwarded to them, at a small expense, one hundred or more copies of their articles, in pamphlet form, provided the order to this effect be received before the period o publication.

The Journal will be sent a second time, when not received one month after the usual period of its appearance.

Rejected manuscript will be returned, if desired, by mail or Express, at the expense of the writer.

Each subscriber will give at length his name, Post Office, County and State.

☞ This Journal is published as a Monthly octavo of ninety-six pages. It is now the larges Medical Monthly issued in America.

The Editors offer to pay, at the HIGHEST JOURNAL RATES, for ARTICLES, ESSAYS, CORRESPONDENCE and REVIEWS OF RECENT WORKS.

The terms of this Journal have been changed; see notice on the cover.

BOOKS AND JOURNALS RECEIVED.

Administration of Chloroform by Deglutition. By Jerome Cochran, M. D., Mobile, Ala. From the Author.

Minutes of the Proceedings of the Medical Society of North Carolina. From Publishers.

The following domestic Exchanges are regularly received:

The Atlanta Medical and Surgical Journal, Ga.

Boston Medical and Surgical Journal, Mass.

Braithwaite's Retrospect, New York.

Buffalo Medical and Surgical Journal, New York.

Chicago Medical Journal, Illinois.

Chicago Medical Examiner, Illinois.

Cincinnati Lancet and Observer, Ohio.

Druggist's Circular and Chemical Gazette, Philadelphia, Pa.

Galveston Medical Journal, Texas.

Journal of Applied Chemistry, Philadelphia, Pa.

London Lancet—Reprint—New York.

New York Medical Record, New York.

New Orleans Medical Journal, Louisiana.

New York Medical Journal, New York.

Pacific Medical and Surgical Journal, San Francisco, California.

St. Louis Medical and Surgical Journal, Missouri.

Southern Journal of the Medical Sciences, New Orleans, Louisiana.
Southern Medical and Surgical Journal, New Orleans, La.
The American Journal of Pharmacy, Philadelphia, Pa.
The American Journal of Medical Sciences, Philadelphia, Pa.
The Dental Cosmos, Philadelphia, Pa.
The Detroit Review, Mich.
The Medical and Surgical Reporter, Philadelphia, Pa.
The St. Louis Medical Reporter, Mo.
The Western Journal of Medicine, Indianapolis, Ind.
The Journal of Materia Medica, Lebanon, N. Y.
The Leavensworth Medical Herald, Kansas.
The American Journal of Dental Science, Baltimore, Md.
The Quarterly Journal of Psychological Medicine, N. Y.
The Medical Gazette, New York.

FOREIGN EXCHANGES.

The London Lancet.
The Ophthalmic Review, London, Eng.
The Medical Mirror, London.
The Canada Medical Journal, Montreal.
The Dublin Quarterly Journal of Medical Sciences, Ireland.
Le Mouvement Medicale, Paris, France.
Journal de Medicine Mental, Paris, France.
Revue Medicale, Paris, France.
Revue de Therapeutique Medico, Chirrugicale, Paris, France.
The Medical Press and Circular, Dublin, Ireland.

MISCELLANEOUS.

The American Naturalist, Salem, Mass.
De Bows' Review, 80 Broadway, New York.
Richmond Eclectic, Va.
The Planter, Richmond, Va.
The Farmer, Richmond, Va.
Littell's Living Age, Boston, Mass.

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ORIGINAL COMMUNICATIONS.

"Qui Docet Discit."

Art. I.—Extract from Clinical Lecture, Delivered at the Howard Grove Hospital. By Hunter McGuire, M. D., Professor of Surgery of Virginia Medical College.

All of the gentlemen present to-day, who have attended for some months the clinical lectures delivered in this Hospital, where negroes only are admitted as patients, have doubtless been surprised at the number of cases presented as scrofulous and tuberculous. A very large proportion of the beds of this institution have been filled by patients suffering under these disorders, and I believe that cases of every grade and variety of struma and tubercle have been shown you. The bed at the end of the room is occupied by a man with scrofulous ulcer of the leg; the next by one who has a large scrofulous abscess; directly opposite a patient whose leg has been amputated for tuberculosis of the knee; next to him a boy not yet recovered from an operation for strangulated hernia, whose lungs Dr. Tucker informs me are filled with tubercles; and here in front of us two cases of scrofulous caries. The two nurses of this ward are also affected, one has scrofulous swelling of the glands of his neck, with cicatrices near them of scrofulous ulcers; and the other has caries of the right scapula from the same constitutional trouble. All the cases in this ward, of these affections, have not been men-

tioned, and the other rooms of the Hospital will be found to contain about the same proportion of cases of this disease.

Among the negro patients who attend the College Hospital clinic, may be noticed the same undue proportion of cases of struma and tubercle. The difference in the number of these cases in the negroes and whites is astonishing. In the post-mortem examinations which have been made before you, you have observed the very frequent exhibition of tuberculous deposits in the lungs and other parts of the body. There has been scarcely one post-mortem made, without finding somewhere in the body more or less tuberculous matter. Negroes who have died from some inflammatory disease, or by accident are almost invariably found with tubercles in their lungs or some other organ. Dr. White, the Demonstrator of Anatomy, informs me that he does not remember to have seen in the College dissecting rooms last, session, a single negro subject entirely free from tuberculous deposits.

These facts are grave and startling, and if they should be found to exist in other communities in the South, of serious importance and fearful interest to the coloured race. I propose to examine them solely in a professional point of view, and if we hereafter find, as I think we have much reason to apprehend, this great physical change in the negroes becoming universal, to enlist your active sympathi s and professional coöperation in doing what we can to avert from them this fearful evil.

When you remember that tubercular disease is almost, if not entirely incurable; that it is hereditary; that it is transmitted from parent to offspring, more certainly than any other disease, and with probably the exception of syphilis, more certainly than all other diseases together. That a parent himself free from tubercle, but suffering bodily deterioration from any cause, entails on the children a tuberculous predisposition, you will find, if my impressions are correct, a frightful cause for the rapid decrease and ultimate extinction of the negroes in this country. I believe it will constitute a cause for their extinction, more potent in its effects than infanticide, dissipation and improvidence, indeed than all others combined.

Let me explain before going farther, that I do not use the terms scrofula and tubercle as synonymous, or at least as commensurate.

By the first is understood a vice or defect of constitution, marked by certain peculiarities even in health, and by a tendency to certain diseases, and a peculiar liability to produce and deposit in different portions of the body a substance called tubercle. The two affections are very often seen in the same individual, but that they are different is shown in the fact that scrofula may exist for years without the development of tubercle, and tubercle be formed without any evidence of preëxisting scrofula.

In this State, during the period of slavery, scrofula, as I have defined it, and as the word is generally understood, was a very frequent affection among the negroes. It was shown by the swollen lymphatic glands of the neck or other parts of the body, by the tumid belly, the thick upper lip, by certain ophthalmias, chronic abscesses, certain affections of the nose and cutaneous eruptions.—While these affections were common, they were invariably chronic; while persistent and rather intractable to treatment, they were mild and their effects slight. The negro was called "scrofulous" and considered rather disfigured than disabled. Though peculiarly liable under depressing influences, such as bad food, insufficient clothing and ill-ventilation will produce tubercular consumption and its kindred maladies. Before the late war, as far as my experience enables me to judge, pulmonary phthisis and other purely tubercular diseases, while common enough in the mulatto, were comparatively infrequent in the negro. Now, however, scrofula in the negro seems to have terminated in what has been called its "essential element," and tubercle is fearfully common.

I believe this change in the physical health of this people is due to a combination of causes, of which the quantity and character of the food they now use is the principal. It has been through the influence of the writings and teachings of Dr. Bennet, of Edinburg, that the Profession has almost unanimously acknowledged as correct the doctrine, that the formation of tubercles is preceded by preliminary dyspepsia. This theory was ably advocated and earnestly recommended to the Profession by Dr. Bennet in 1841. He had observed that phthisis pulmonalis was preceded, or its early stages accompanied by a bad or capricious appetite, furred tongue, and a variety of symptoms known as dyspeptic, and due to derangement

of the primæ viæ. In consequence of the mal-assimilation of the food, nutrition became imperfect, the growth of tissues faulty, and tne blood impoverished. Under such circumstances, exudations into the lungs occurred, and tubercles were formed. Reason and subsequent experience, with great unanimity, confirm this doctrine of Bennet. He tells us that the experiments of many physiologists prove, that health depends upon a proper admixture of certain elements of food, that there must be mineral, albuminous and oily substances. That we see this in the constituents of milk, the natural food for the young mammiferous animals; in the contents of the egg, the source from which the tissues of the oviporous animal are first formed; and in the principles found in the food of adult animals. The physicians at the Brompton Hospital for consumption in London, have found that treatment based upon this doctrine of Bennet's treatment to correct the imperfect digestion the "preliminary dyspepsia" frequently stops the tendency to the formation of tubercles and renders harmless those already described.

By this treatment also the physical signs and general symptoms may disappear, and even large pulmonary caverns heal up and cicatrise. Dr. Wood, of Philadelphia, says, that the fatal results have not only been postponed but the number of deaths from phthisis diminished in this country by principles of treatment based upon this doctrine. To improve the faulty nutrition, the cause of the tubercular cachexia, it is necessary to have assimilated fatty matter in large quantities, and of all medicinal remedies for this purpose, none enjoys so high and well founded a reputation as cod liver oil. You have seen how beneficial it has been in these cases here, more so, than any or all other medicinal substances. The experience of the physicians in the London Hospital referred to, where the value of the medicine has been fairly and fully tested, where more than 600 gallons of the oil are annually used, confirms the statement first made by Bennet. Other oils and fat, where they can be taken and digested, are sure to be followed by improvement.—Asses milk, or milk rich with fatty matter, cream, butter, bacon, mutton, and the marrow of bones, are beneficial, and Dr. Thompson found the administration of neat's-foot oil attended by excellent

effects. But cod liver oil has been found to be the best because it is more easily digested and more readily assimilated. Possibly the biliary elements it contains may render it more digestible.—The proportion of bromide, iodine, and phosphorus found in it are too minute to have any important share in its good effects.

Before the war the negroes were fed by their masters upon the food, which of all others conduced to their health. A diet which prevented their scrofula from becoming tubercle. Fat bacon or "middling" was the almost invariably daily issue, with, (in the country especially) an abundant supply of bread, milk, and vegetables. This, with exercise for so many hours, by their daily labour, plenty of clothing and sleep, kept in abeyance their predisposition to tubercle, and made them really healthier and longer lived than their owners. Now their thriftless character makes them suffer sometimes for a sufficiency of food, and that obtained is generally of an unsuitable character. Whatever money they have to spare for food, they spend for stale vegetables, unripe fruits, pastry, salted provisions, &c., the very articles which scrofulous people should avoid. Among other causes for this great change in the physical health of this people, may be mentioned their clothing. Some of the most improvident among them have scarcely enough clothes to hide their bodies, and those able to purchase them generally buy flashy and, thin flimsey garments, which poorly protect them from wet and cold. Their clothes are very different now from the thick warm homespun they formerly wore. We have also intemperance and excess adding their share to the trouble, inpure air from overcrowding and want of ventilation, as well as from noxious vapours and gases, arising from dirt and filth Few causes can rival this for mischief. We have too, mental depression and anxiety, and I need not dwell upon the evil this produces, when prolonged and intense. Laughter and music, so common among them before, are rarely heard now, and lastly we have other diseases among them, favouring the formation of tubercle. All of us have been struck with the number of cases of venerial diseases, especially syphylis, occurring among them since their freedom, and all of us have noticed how peculiarly difficult these disease are to remedy in them. A distinguished physician, with whom I conversed upon this sub-

ject a few days ago, attributed this difficulty, to the negro's negligence in applying, or inability to procure the proper remedies I am confident he was mistaken in ascribing it altogether to these causes. I have found the diseases as difficult to treat in hospital practice, where the remedies are regularly and carefully administered, as he found them in civil practice, and I believe that the true cause of this trouble in curing syphilis in the negro now, is that you have also to contend with a scrofulous diathesis. Thus you see we have other diseases, syphilis the most common, only I have mentioned, producing depression, causing debility and favouring the formation of tubercles.

I regret that the time allowed me here to-day is too short to enter more fully into this subject, and that circumstances have compelled me to present what I have said, in so hurried and cursory a manner. I have barely attended to some facts which I would have preferred to dwell upon, and omitted altogether some important considerations which I had hoped to be able to present. I trust, however, that what I have said will be sufficient to attract your attention, and that of the Profession generally, to this subject. I shall continue its investigation and take occasion to speak of it again.

Art. II.—The Conditions of Success in Ovariotomy. By R. G. Battey, M. D., Rome, Ga.

Now that ovariotomy has made such progress, as to have signally overcome prejudice and opposition, and to have firmly established itself among the great operations of surgery, the question *what are the conditions of its success*, is one of more general interest to the Profession.

The first volume of Mr. Spencer Mill's work on the diseases of the ovaries, lately issued from the English press, in which he gives a detailed history of 115 ovariotomy operations done by himself, affords, by proper analysis, an opportunity of throwing some light upon the subject. The cases have been tabulated by the writer for convenience of reference and comparison, with a view to the eluci-

dation of certain points, more or less common to considerable numbers of the cases, which may be assumed to influence, in greater or less degree, the results of the operation.

While the cases are not always detailed with the minuteness which would be desirable for our present purpose, still the reports are more fully and satisfactorily given than any similar number which can be drawn from the Journals, or other sources at present accessible to the Profession. And, while the number of the cases is not as large as might be desirable for statistical deductions, they are neverthless entitled to weight for several reasons, among which may be cited the following: 1st. They are detailed with a commendable air of candour and impartiality. 2d. They are all operated by the same hand, and the uncertain element of manual dexterity thereby eliminated, except as one must needs gain in skill by repeated practice. 3d. A report of *all* the cases operated on is given. 4th. In the selection of the cases there does not appear to have been any disposition manifested to single out only such as might have been expected to furnish the best statistics, but all were operated which could be properly subjected to the knife, with reasonable hope of benefit. The number of cases may be pronounced respectable; they are a fair average of the disease as it presents itself to the Surgeon in practice, both in private and in hospital; they are apparently given without reason—without partiality.

In 114 cases the age is stated—of these thirty-eight were under thirty years old; forty-seven varied from thirty to forty-five, and twenty-nine were over forty-five. Of the young thirty-two per cent. died, fifty per cent. recovered promptly, eighteen per cent. recovered tardily; the abdominal wound healed by first intention in sixty-three per cent. and by granulation in three per cent. Of the middle aged thirty-eight per cent died, forty-six per cent. recovered promptly, fifteen per cent. tardily, sixty per cent. healed by first intention and eleven per cent. by granulation. Of the old, thirty-one per cent. died, fifty-nine per cent. recovered promptly, ten per cent. tardily, seventy-six per cent. healed by first intention and three per cent. by granulation.

These figures seem to be in accordance with observations made in the results of other maladies of women. In early womanhood the

vigour and resiliency of the constitution appear to bear the depressing influences of shock, hæmorrhage and inflammation better than in more advanced life. In middle age the greater activity of the generative functions, with impaired vital power from repeated gestation, causes the rate of mortality to rise, while in old age the absence of uterine and ovarian functions again reduces the death rate.

The *social relations* of 109 of the patients are stated: Fifty-five per cent. were single, seventeen per cent. were barren married women and 28 per cent. only had borne children. Of the unmarried thirty-three per cent. died, fifty-five per cent. recovered promptly, twelve per cent. tardily, eighty-three per cent. healed by first intention and three per cent. by granulation. Of the barren forty-seven per cent. died, fifty-seven per cent. recovered promptly, sixteen per cent. tardily, sixty-eight per cent. healed by first intention and ten per cent. by granulation. Of the fruitful thirty-seven per cent. died, forty-three per cent. recovered promptly, twenty per cent. tardily, sixty per cent. healed by first intention, and seven per cent. by granulation.

The great mortality amongst the barren women, less in the fruitful, and least in the unmarried, accords with our perconceived opinions. The very large proportion (83 per cent.) in which the abdominal wound, in the last mentioned class, healed by first intention is worthy of remark, and particularly when coupled with the further observation, that while the mortality in the barren was ten per cent. greater than in the fruitful, nevertheless, the cases of union by first intention were greater by eight per cent. These facts would seem to indicate an impairment of vital power in the abdominal walls, due to repeated child-bearing, and unfavourable to the establishment of adhesive union.

The deductions from the foregoing comparisons as to the ages and social relations of the patients should be modified by the further consideration that of the patients under thirty, 84 per cent. were single, eleven per cent. barren, and but five per cent. fruitful; while of the middle aged forty-three per cent. only were single, twenty per cent. barren and fifty-seven per cent. fruitful; and of the old thirty-four per cent. single, twenty-two per cent. barren and forty-four per cent. fruitful.

While the mortality of the middle aged is six per cent. greater than the young, and seven per cent. greater than the old, that of the barren is ten per cent. greater than the fruitful and fourteen per cent. greater than the unmarried, and as nearly one half (47 per cent) of the barren women fall likewise in the class of the middle aged, it may well be doubted whether the age alone exercises any important influence over the mortality. This doubt is further strengthened by the observation that the deaths vary between the young and the old only one per cent.

In thirty patients the *menses* are stated to be regular, in sixteen to be irregular and in twelve to be absent under forty-five years of age. Of those who were regular thirty-three per cent died, forty-seven per cent. recovered promptly; twenty per cent. tardily, sixty per cent. healed by first intention and seven per cent. by granulation. Of the irregular forty-four per cent. died, fifty per cent. recovered promptly, six per cent. tardily, sixty-three per cent. healed by first intention, and six per cent. by granulation.—Of the cases of suspended menses thirty-three per cent. died; fifty per cent. recovered promptly, seventeen per cent. tardily, sixty-seven per cent. healed by first intention, and eight per cent. by granulation.

It further appears that of those who were regular sixty-nine per cent. were single, ten per cent. barren and twenty-one per cent. fruitful; of the irregular forty-four per cent. were single, twenty-five per cent. barren and thirty-one per cent. fruitful; of the suspended menses fifty per cent. were single, twenty-five per cent. barren and twenty-five per cent. fruitful.

It will be seen the number of deaths among the irregular exceeds that of the regular by eleven per cent., and the suspended likewise by eleven per cent., and as the ratio of the barren among them (the irregular) is only twenty-five per cent., it cannot with justice be assumed that the unfavourable influence of the menstrual irregularity is one and the same with the barrenness, but must be admitted as a distinct element, of more or less value in the causation of fatal issue.

The general health in sixteen of the cases is stated to be good, in thirty-three cases to be pretty good, and in twenty-five to be bad.

Of those in good health, twenty-five per cent. died, fifty per cent. recovered promptly, twenty-five per cent. tardily, seventy-five per cent. healed by first intention, and six per cent. by granulation.—Of those in pretty good health twenty-seven per cent. died, sixty-one per cent. recovered promptly, twelve per cent. tardily, sixty-four per cent. healed by first intention, and three per cent. by granulation. Of those in bad health, fifty-two per cent. died, twenty-eight per cent. recovered prompty, twenty per cent. tardily, forty-eight per cent. healed by first intention, and sixteen per cent. by granulation.

These figures fully corroborate the generally received opinion of the influence of the state of general health upon the results of an operation. Its influence is strikingly illustrated not only in the per centage of deaths, but also in the manner of healing of the abdominal wound. There is no deduction to be made from the full force of the figures given on account of barrenness or irregularity of the menses; for while the ratio of barren and irregular in good health is 38 per cent. of those in bad health it is only 32 per cent.

The observation of the disease makes a notable difference in the result. Of 25 cases under one years' duration, 40 per cent. died, 40 per cent. recovered promptly, 20 per cent. tardily, 60 per cent. healed by first intention and 12 per cent. by granulation. Of 78 cases over one years standing, 32 per cent. died, 53 per cent. recovered promptly, 15 per cent. tardily, 67 per cent, healed by first intention, and 5 per cent. by granulation.

To ascertain, if practicable, how far the influence of duration of the disease is modified by the influences of barrenness, irregularity and bad health which the statistics seem to show to be unfavourable to recovery, the following comparison was made: Of the *recent* cases 28 per cent. were barren, 24 per cent. were irregular and 12 per cent, in bad health, while 14 per cent. of the more *chronic* cases were barren, 12 per cent. irregular and 28 per cent. in bad health. Although the numerical preponderance of the unfavourable conditions is to the advantage of the more recent cases—still as the rates of bad health is largely on the other side and as the effect of bad health upon the mortality appears to be so much more decided than either barrenness or irregularity—it may be safely assumed that

the relative influence of duration of disease is fairly represented by the figures given, namely, in the ratio of 40 to 32.

Sixty-six of the cases had been *previously tapped*—of these 32 per cent. died, 51 per cent. recovered promptly, 17 per cent. tardily, 67 per cent. healed by first intention and 9 per cent. by granulation. Of the *whole number* of cases, 34 per cent. died, 51 per cent. recovered promptly, 15 per cent. tardily, 65 per cent. healed by first intention, and 6 per cent. by granulation. The close correspondence of the ratio in this comparison is so striking as to make it evident that the previous tapping did not in any sensible degree influence the result.

The *abdominal incision* in 68 of the cases was short, and in 37 long—of the former 29 per cent. died, 52 per cent. recovered promptly, 19 per cent. tardily, 75 per cent healed by first intention, add 7 per cent. by granulation. Of the latter 41 per cent. died, 46 per cent. recovered promptly, 13 per cent. tardily, 59 per cent. healed by first intention, and 8 per cent. by granulation.

It will be observed that the difference in mortality between the two classes is 12 per cent., and that while the ratio of the first class who recovered promptly is 6 per cent. greater; the ratio of those who recovered tardily is likewise 6 per cent. more, under the favouring influences of a short abdominal incision.

Of the 68 cases operated by the short incission 16 per cent. were among the barren, 16 per cent. irregular in their menses, 15 per cent. in bad health, and 36 per cent. under one years duration, while of the long incision 16 per cent. were barren, 11 per cent. irregular, 38 per cent. in bad health and 14 per cent recent cases. It therefore appears that the ratio of unfavourable influences is, when summed up numerically, quite equally ballanced between the two classes under consideration. The ratio of barren being the same in each; of the irregular being 5 per cent. of recent duration, 11 per cent. greater in the short incission, while the ratio of bad health is 23 per cent. greater in the long incission. But as we have previously found the potency of bad health greater by far in the causation of fatal issue than either irregularity or recent duration—a deduction is to be made from the apparently unfavourable agency of the long incision. This deduction too would be still

further augmented if we should take into consideration that the short incision was made in the cases of tumours less complex in structure than the others, having less solid material for removal, as well as in general, fewer adhesions to be broken down.

In 40 cases there were no adhesions; 35 per cent died, 50 per cent. recovered promptly, 15 per cent. tardily, 65 per cent. healed by first intention, and 8 per cent. by granulation. In 31 cases there were slight adhesions; 36 per cent. died, 48 per cent. recovered promptly, 16 per cent. tardily, 61 per cent. healed by first intention, and 3 per cent. by granulation. In 41 cases of extensive adhesions, 32 per cent. died, 51 per cent. recovered promptly, 17 per cent. tardily, 68 per cent. healed by first intention, and 7 per cent. by granulation.

The foregoing figures do not show that extensive adhesion interferes appreciably with good recovery, but the preponderance is slightly upon the other side: nor is this conclusion shaken at all by an examination into the barrenness, irregularity, bad health, and short duration in the several cases. Of the 40 who had no adhesions, 12 per cent. were barren, 12 per cent. irregular, 20 per cent. in bad health, and 27 per cent. of short duration. Of the 31 slight adhesions, 16 per cent. were barren, 13 per cent irregular, 23 per cent. in bad health, and 16 per cent. of short duration; while of the extensive adhesions, 22 per cent. were barren, 15 per cent. irregular, 24 per cent. in bad health, and 22 per cent. of short duration, making a sum total of unfavourable influences of 71 in the cases of no adhesions, 68 in the slight, and 83 in the extensive: thus confirming the truthfulness of the ratios given.

So too if we compare the three classes as to the perponderating influence of bad health, we find the ratio of the extensive adhesions (24) greater than that of no adhesions (20). Hence, so far as conclusions may be drawn from the series of cases under consideration, it is evident that the presence of adhesions exercises no untoward influence over mortality, and it would be obviously observed to argue from the slight difference in the ratios, a favourable tendency of adhesions.

In fifteen cases there was much hæmorrhage, and 40 per cent. died, 20 per cent. recovered promptly, 33 per cent. tardily, 40 per

cent. healed by first intention, and 13 per cent. by granulation.—Of these cases, 27 per cent. were barren, 7 per cent. irregular, 47 per cent. in bad health, and 27 per cent. of short duration; thus showing this to be a bad class of cases, independently of the hæmorrhage; it seems proper, therefore, to take into account the influence of bad health, at least in partial abatement of the ratio of mortality from the hæmorrhage, separately considered. The very large proportion (33 per cent.) who recovered tardily, exhibits even more strikingly than the rate of mortality, the unfavourable effects of much loss of blood.

In fifty-nine cases, one ovary alone was involved in disease; 34 per cent. died. In 15 cases, both ovaries were more or less involved; 33 per cent. died. In four cases both ovaries were entirely removed; 25 per cent. died. As three of the last mentioned four cases were in good health, and with the exception of barrenness, free from other untoward tendencies, it does not appear that the implication of one or both ovaries influences at all the result.

In fifteen cases the *omentum* was torn and ligatured, 40 per cent. died, 33 per cent. recovered promptly, and 27 per cent. tardily. Of the fifteen none were barren, only 7 per cent. irregular, 7 per cent. in bad health, 27 per cent. recent cases, and 33 per cent. had much hæmorrhage. So, that leaving out the occurrence of hæmorrhage this seems to be a very favourable class of cases; and as only one-third are stated to have lost much blood, it is fair to assume the position that laceration and ligature of the omentum exercised a positive influence in raising the rate of mortality.

In thirty-two cases the tumour was below 30 pounds in weight, 31 per cent. died, 47 per cent. recovered promptly, 22 per cent. tardily, 56 per cent. healed by first intention and 9 per cent. by granulation. In 36 cases above 30 pounds weight, 39 per cent. died, 47 per cent. recovered promptly, 14 per cent. tardily, 69 per cent. healed by first intention, and 3 per cent. by granulation.—The ratio of the 32 cases shows 9 per cent. barren, 9 per cent. irregular, 22 per cent. in bad health, 10 per cent. of short duration, 12 per cent. much hæmorrhage, and 12 per cent. lesion of the omentum. The ratio of the 36 cases shows 19 per cent. barren,

11 per cent. irregular, 28 per cent. in bad health, 17 per cent. short duration, 19 per cent. much hæmorrhage, and 19 per cent. lesion of omentum. The sum of unfavorable influences is in the former 83 and in the latter 113. So the untoward influence of the large size of the tumour, though it is evidently appreciable, must be set down at less than the difference of eight per cent. shown by the statistics.

In 17 cases the cyst was simple, 18 per cent died, 64 per cent. recovered promptly, 18 per cent. tardily, 76 per cent. healed by first intention, and 6 per cent. by granulation. In 93 cases of compound cyst 38 per cent. died, 48 per cent. recovered promptly, 14 per cent. tardily, 65 per cent. healed by first intention and 6 per cent. by granulation.

Of the *simple* cysts, 18 per cent. were barren, 12 per cent. irregular, 6 per cent. in bad health, 35 per cent. of short duration, 6 per cent. much hæmorrhage, none ligature of omentum, and 24 per cent. large tumours, while the compound cysts had 17 per cent. barren, 15 per cent. irregular, 25 per cent. in bad health, 18 per cent. of short duration, 16 per cent. much hæmorrhage, 14 per cent. omental lesion and 31 per cent. large tumours.

It will be seen that the unfavourable points are one-third greater in the aggregate, in the compound cysts, and in the three leading points of bad health, hæmorrhage, and omental lesion, the ratio is as 12 to 53. So that while the mortality of the compound cysts appears, by the first comparison, to be more than double that of the simple, a due consideration of the other attending circumstances would greatly reduce this proportion, perhaps fully one half, in order to arrive at a correct estimate of the influence of the character of the cyst separately considered.

Seventeen cases were complicated with ascites, 65 per cent. died, 29 per cent. recovered promptly, 6 per cent. tardily, 47 per cent. healed by first intention, and 6 per cent. by granulation. Of the cases 18 per cent. were barren, 24 per cent. irregular, 53 per cent in bad health, 24 per cent. of short duration, 12 per cent. much hæmorrhage, 18 per cent. omental lesion, 47 per cent. large tumours and all of them compound cysts, thus showing it to be an extremely bad class of cases.

When we take into account the high rate of mortality attending the cases of irregular menses, (44,) of bad health (52,) short duration (40,) of large tumours (39,) and of compound cysts (38); and consider further that the seventeen cases were each, upon the average, subjected to three of these untoward influences, besides the ascites, the presence of the dropsical fluid in the peritoneal cavity, is a point of much less significance than at first sight appears.

In seventy-six cases the pedicle was secured by Mr. Spencer Mill's clamp; 29 per cent. died, 54 per cent. recovered promptly, 17 per cent. tardily, 71 per cent. healed by first intention, and 7 per cent. by granulation. In fifteen it was secured outside by pins passed through the abdominal walls; 40 per cent. died, 53 per cent. recovered promptly, 7 per cent. tardily, 53 per cent. healed by first intention, and 7 per cent. by granulation. In two cases it was secured by the ecraseur; one died, and one recovered promptly,

In thirteen cases the ligature was cut short and the pedicle allowed to drop back into the pelvis; 54 per cent. died, 31 per cent. recovered promptly, 15 per cent. tardily, 54 per cent. healed by first intention and 8 per cent. by granulation. In eight cases the ligature was brought out through the wound; 50 per cent, died, 25 per cent. recovered promptly, 25 per cent. tardily, 38 per cent. healed by first intention, and 12 per cent. by granulation.

The ratio of unfavourable influences in this classification, when summed up, is, for the clamp 219, pins 206, ecraseur 200, short ligature 291, and long ligature 261. The number treated by the ecraseur (2) is entirely too small for fair comparison; of the others the class secured by pins was the most favourable, the clamp next, long ligature next, and the short ligature least. The ratio of patients in bad health did not differ materially; the duration of tumour was considerably in favour of the clamp; laceration of omentum were pretty equally distributed; so also the size of tumours, their structure and the presence of ascites. In the item of hæmorrhage, the comparison stands, clamp thirteen, pins none, short ligature thirty-one, long ligature twenty-five; a difference fairly chargeable, in great part at least, to the particular manner of securing the pedicle. So far as the series of cases goes, it appears

to be undeniable that the use of the clamp exercised an important favourable influence over the result; an influence indeed, but little less important than the state of general health.

In sixty-seven cases the abdominal wound was united by silk sutures; 33 per cent. died, 48 per cent. recovered promptly, 19 per cent. tardily, 66 per cent. healed by first intention, and 6 per cent. by granulation. In ten cases, united by wire suture, 40 per cent. died, 50 per cent. recovered promptly, 10 per cent. tardily, 70 per cent. healed by first intention, and none by granulation. In 31 cases secured by pins 35 per cent. died, 52 per cent. recovered promptly, 13 per cent. tardily, 61 per cent. healed by first intention and 10 per cent. by granulation.

The fact that the figures show a larger per centage of prompt recovery and union by first intention among those treated with the metalic suture, than those treated with silk, while the mortality is 7 per cent. larger, naturally suggests a search for other causes of this discrepancy.

The ratio of unfavourable influences, stands, in the aggregate, for the silk 250, wire 260 and pins 288. Examined as to bad health, the ratio is silk 13, wire 20, pins 35; as to size of tumour, silk 28, wire 40, pins 29; character of tumour, silk 73, wire 90, pins 94; as to ascites, silk 12, wire 10, pins 19; as to the non-use of clamp, silk 28, wire 20, pins 52. These ratios would seem to explain fully the diminished mortality in the case of the silk suture, while the more prompt union of the abdominal wound, and the more speedy recoveries, still remain on the side of the metalic closures. In an operation like ovariotomy, attended by so many important dangers, it is scarcely to be expected that the question as to the material of sutures for the abdominal wound, can become one of any great importance in determining the final issue.

In twenty-two cases much opium was used in the after treatment, 55 per cent. died, 40 per cent. recovered promptly, 5 per cent. tardily, 45 per cent. healed by first intention, and 5 per cent. by granulation. Forty-one cases had little opium; 27 per cent. died, 51 per cent. recovered promptly, 22 per cent. tardily, 68 per cent. healed by first intention, and 7 per cent. by granulation. Ten cases had none; 20 per cent. died, 60 per cent. recovered promptly, 20 per cent.

tardily, 90 per cent. healed by first intention, and none by granulation.

There is a remarkable contrast in the mortality presented in this classification—a mortality which manifestly cannot be wholly attributable to the use, or non-use of opium. Upon analysis it is found that the sum of unfavourable influences stands in the following ratio: Much opium 314, little opium 233, none 210; and the average of these unfavourable influences among the whole mass of cases is 252. If now a comparison be instituted, including four only of the more important influences, namely, bad health, duration of tumour, ascites, and non-use of the clamp, each of which we have seen to give a large ratio of mortality, the ratio would stand, much opium 136, little opium 70 and none 20, a proportion of unfavourable points notably greater than that of the mortality, so that it would be difficult to establish, from these cases, any decided influence upon mortality, dependent upon the mere fact of the use or non-use of opium, aside from the presence or absence of influences bearing upon the cases to demand, or not, its use.

If it could be considered allowable to carry the numerical method so far as to say, that, as the average of unfavourable influences is 252, the ratio set down to much opium 314, and the average of deaths 34 per cent; then 252 is to 314, so is 34 to 42 for the ratio per centum of deaths, which might be expected among these cases, on account of other influences aside from opium. But such a use of the method would lead us to quite a different result, if in place of summing up all the unfavourable influences, as though they were of equal value, we discriminate, and take the four only, which appear to exercise the greatest influence over the result, and institute the following proportion, (the average of these being 75) say, as 75 the average, is to 136, the number set down to much opium, so is 34 the average of deaths to 62, the per centage of deaths which might be expected in this class of cases, on account of the four complications named, and independently of the use of much opium. The per centage, 62, is considerably above, as the other result, 42, was below the actual per centage given, 55.

To undertake to give an absolute numerical value to each, or to establish an absolute numerical relation between the several unto-

ward influences under consideration, is manifestly impracticable, and hence such arithmetical proportions as are above suggested, must be esteemed unreliable, and an abuse of the numerical method. We can only approximate conclusions by exercising discriminating judgment, whilst duly weighing the evidence of statistics.

In the after treatment forty-seven cases were complicated with nausea and vomiting; 59 per cent. died, 30 per cent. recovered promptly, 11 per cent. tardily, 43 per cent. healed by first intention, and 6 per cent. by granulation. Of these cases, 15 per cent. were barren, 21 per cent. irregular, 30 per cent, in bad health, 23 per cent. of short duration, 17 per cent. had much hæmorrhage, 17 per cent. omental lesion, 30 per cent. were large tumours, 89 per cent. compound tumours, 15 per cent. had ascites, and 47 per cent. were treated without the clamp.

Thirty-eight cases were complicated by tympanitis, 61 per cent. died, 26 per cent. recovered promptly, 13 per cent. tardily, 45 per cent. healed by first intention, and 11 per cent. by granulation.

Twenty-three cases were complicated by peritonitis, 96 per cent. died, 4 per cent. recovered promptly, and 22 per cent. healed by first intention.

Three cases were complicated by tetanus or trismus; 67 per eent. died, 33 per cent. recovered tardily, and all healed by first intention.

Four cases were complicated by pyæmia or septicæmia, 75 per cent. died, 25 per cent. recovered. Six cases were complicated by blood or pus in Douglass' space, 50 per cent died, 17 per cent. recovered promptly, 33 per cent. tardily, 33 per cent. healed by first intention, and 17 per cent. by granulation.

In conclusion, the following points seem to be established by the foregoing analysis of the published cases of Mr. Spencer Mill's, namely—

(a.) *Conditions Favourable to Success.*

1. Virginity.
2. Good general health.
3. Tumour over one year's duration.
4. Short abdominal incision.

5. Small size of tumour.
6. Simple cyst.
7. The use of his clamp.

(b.) *Conditions Unfavourable to Success.*

1st. Barrenness.
2d. Bad general health.
3d. Tumour under one year's duration.
4th. Irregular menses.
5th. Long abdominal incision.
6th. Much hæmorrhage.
7th. Lesion and ligature of the omentum.
8th. Large size of the tumour.
9th. Compound cyst.
10th. Ascites.
11th. Subsequent complications.

(c.) *Conditions of more or less Indifference.*

1st. Age of the patient.
2d. Previous tapping of the cyst.
3d. Adhesions, when they can be successfully broken down.
4th. One or both ovaries involved.
5th. The kind of suture.
6th. Quantity of opium used.

Art. III.—The Value of the Suture, in Flap Operations for the Extraction of Cataract. By J. J. Chisolm, M. D., Professor of Surgery in the Medical College of the State of South Carolina.

Instances have occurred in the experience of every ophthalmic surgeon, whilst performing the flap operation for cataract, in which, owing either to an excessive loss of vitreous secretion, or a want of elasticity in the cornea, the edges of the incision will not spon-

taneously come into juxtaposition. Under such circumstances, the eye is usually lost, by inflammatory action, followed by sloughing of the corneal tissues.

We are indebted to Dr. Williams, Ophthalmic Surgeon of Boston, for a valuable suggestion in these difficult cases. Being familiar with the apparent liberties which a skilful surgeon may take with certain of the tissues of the eye, he was induced to experiment with the living cornea, to test the extent of irritation which would be excited by the presence of a suture in its substance. European surgeo had led the way by applying threads to the prolapsed iris, and so successfully, that the use of the ligature upon iritic substances for the purpose of displacing the healthy pupil to a transparent portion of the cornea, in cases of albugo, had become an established operation under the appellation of "Iridodesis."—The strangulation of a portion of the iris and the presence of a ligature, creates but little inflammatory excitement in this delicate tissue. The presumption was that the cornea would be equally submissive. Experience has sustained these deductions.

Dr. Williams has published a series of cases in which the position of the flap had been secured by suture to the sclerotic surface of the wound, and union by the first intention has been rapidly effected, with a perfect adjustment of the divided surface. Dr. Williams has established the fact, that when a fine thread is used, the suture may remain in for several days, or even until it is spontaneously eliminated, without inducing injurious irritation. He therefore recommends its application in all flap extractions, for the purpose of ensuring perfect union and the rapid healing of the wound. He removes the su ure on the 5th day.

In the majority of cases where lenses have been removed through a corneal flap, and even where there has been some loss of vitreous, the edges of the incision come well together and are admirably retained by the equible pressure of the closed lid. Such cases nearly always do well. In judiciously selected cases of cataract for flap extraction, without the aid of suture, success is the rule, the total loss of an eye seldom taking place. In such cases there are no additional precautions required to ensure complete adjustment to the flap, and sutures are unnecessary.

There are a few cases, however, in which the safety of the eye resides in the judicious application of a suture, and without it the destruction of the organ is unavoidable. The following is a case in point.

Mr. M., aged 70, in good health, although very nervous, presented himself for relief from the annoying effects of a double cataract.— The left eye had commenced to grow dim many years since and the lens in it was now thoroughly hard. Cataractous opacity of the right was making daily and rapid progress. I operated on April 24th, 1867, for ordinary extraction, the left eye appearing in every way suitable for this method of procedure. As there was a strong tendency to congestion of the brain and as his face was naturally flushed it was deemed unadvisable to administer chloroform.— During the various steps of the operation the patient behaved with unflinching firmness.

The section of the flap was made without accident and the lids were closed preparatory to dividing the capsule. After awaiting the usual time of one or two minutes to allow all spasmodic tendencies to subside, the lids were spontaneously raised, when a gush of vitreous took place. After resting the eye again for a moment and then examining it, the lens could no longer be seen. The upper portion of the zonula holding and suspending the lens in position had given way, and after the large escape of vitreous secretion, the lens had fallen backwards and downwards into the vitreous chamber, the contraction of the pupil shutting it out from view. Any pressure made upon the globe to induce the lens to present at the pupilary opening, was accompanied by an increased loss of vitreous. Iridectomy was now performed, and the lens being readily seen through the enlarged pupil was lifted from its position and extracted by a Schuft's spoon.

When the eye was finally examined preparatory to closing the lids, it was found that so much of the secretions of the eye had been lost, that the anterior view of the globe was nearly star-shaped.— Deep furrows existed where pressure was made upon the ocular shell by the tendons of the recti muscles, the intervening portions bulging outwards nearly in points. Owing to atmospheric pressure and the large empty space within, the cornea had collapsed, its

outer surface forming a concavity, with its divided free upper edge sucked into the space from which the iris had been removed, thereby falling within and away from, the sclerotic section, by fully a line. No position, nor justifiable pressure, could bring the lips of the wound in apposition. Had I adopted the old plan of shrugging the shoulders, condemning the eye, and shutting it from view by bandaging the lids, this treatment without fail would have been followed by rapidly developed inflammation, with all of its concomitants of pain, swelling, and sloughing of the cornea.

In this extremity, I did not hesitate to apply the suture, which secured the flap firmly in position, and procured a tolerable adjustment of the entire edge of the cornea to the wavy sclerotic surface. The eye was closed in my usual way with isinglass plaster, *without compress or bandage*, believing that the weight of the lids and the amount of pressure made by the contraction of the orbicular muscle, are in every instance, a sufficient protective support. Cold water was constantly applied. The plasters were removed on the third day, and the suture withdrawn on the 5th, by which time the entire corneal wound was firmly and completely healed.

I consider that the suture was indispensable to the saving of the eye in this special case.

ART. IV.—A CASE OF VESICO-VAGINAL FISTULA, RESULTING FROM A PISTOL BALL, WHICH ENTERED THE THIGH AND PASSED THROUGH THE BLADDER AND ABDOMEN. By THOMAS ADDIS EMMET, M. D., Surgeon of the N. Y. State Woman's Hospital, New York.

Miss H., aged 25, was admitted to the Woman's Hospital, from Virginia, Dec. 18, 1866, with the following history: In March, 1865, while resisting the attempt of a soldier to buckle a holster of pistols around her waist, a navy revolver fell out, and on striking the floor it was discharged, with the muzzle upwards. As a number of persons were in the room at the time, she did not inform her friends that she had been injured, and the fact was not known until she fainted from the loss of blood. On examination it was ascer-

tained that the ball had entered the right thigh and passing into the body was found lodged immediately under the skin, just above the crest of the ilium, on the left side. She was confined to her bed for five weeks, during which time the track of the ball through the thigh healed, but with incontinence of urine remaining. Several months afterwards, Dr. Fisher, of Warrenton, Virginia, operated for the purpose of closing the vesico-vaginal fistula, but with only partial success, and in November last placed her under my charge. The point of entrance into the right thigh was about five inches below Poupart's ligament and two inches outside of the femoral artery. The ball had crossed the course of the artery and entered the pelvis (apparently through the thyroid foramen) to the vagina, thence obliquely into the bladder, perforating its base in the median line, about midway between the neck and cervix uteri.—After examining carefully the bladder with a sound, quite a prominent fold or shelf was felt on its posterior wall, stretching across the cavity, just above the line of peritoneal reflexion from the bladder to the uterus. It was therefore evident that the ball had escaped from the bladder at this point, into the abdominal cavity, and striking the uterus obliquely below the fundus, had glanced off nearly at a right angle, and passing among the intestines, lodged under the skin just below the crest of the ilium on the left side.—The ball was conical in shape and weighed half an ounce. At the time of the accident, the bladder contained but a small quantity of urine; it was immediately emptied, and remaining in this condition, in consequence of the opening below, no urine escaped into the abdominal cavity. The point of exit was soon closed by adhesive inflammation, while the bladder was in a collapsed state and one portion lying doubled on another at this point, formed the fold felt with the sound. The fistula, was nearly circular and still large enough to admit the first joint of the index finger. Its edges were tense and formed of cicatricial tissue, extending to some distance from the opening. On the day after her arrival, as she was in excellent condition, I operated and was assisted by Dr. Fisher.—There was no difficulty, and without the aid of an anæsthetic, the opening was closed by nine interrupted silver sutures. On the third day the urine became phosphatic, and it was with great diffi-

culty that the catheter could be kept sufficiently free from the large quantity of mucous. On the sixth day, the urine began to escape by the vagina, but only in a small quantity. The sutures were removed on the eight day, and it was then found that no union had taken place, as the edges separated as soon as the sutures were withdrawn. From the fact that the edges had been brought together readily without tension, the cause of failure was attributed to the long and tedious journey which she had taken just previous to the operation. After recovery from the operation, she was admitted to the Woman's Hospital, for the benefit of more experienced nursing.

December 26th, the fistula was again closed, at right angles to the long diameter of the vagina, by thirteen sutures, the patient being under the influence of ether. After the vomiting inconsequence of the anæsthetic had ceased, she had not a bad symptom, and the urine all passed by the catheter.

On the ninth day, the speculum was introduced for the purpose of removing the sutures, but as a slight moisture was noticed about the center of the line of union, it was deemed advisable to allow them to remain a few days longer. Jan. 9th.—The sutures were removed and apparently the operation was successful. Jan. 11.—The use of the catheter was discontinued. On the 12th instant, she sat up and had perfect control of the urine. Jan. 15. After an examination she was pronounced cured, and made her preparations to return home in a few days. But shortly afterwards (possibly in consequence of the last examination) the urine began to escape from the vagina, gradually the edges separated and in a few days the parts were nearly in their original condition. March 31st.—The previous operation was repeated but without an anæsthetic and thirteen sutures were introduced. A few days afterwards, cystitis came on, as in the first instance. The sutures were removed April 9th, and although but little had been gained by the operation, yet the opening gradually by contraction lessened to half its original size. It was now evident that the recurrent symptoms of cystitis were due to chronic inflammation of some portion of the bladder, which was quiescent so long as the urine had a free outlet of escape at the most dependent point. That with the cystitis and from the cicatricial character of the tissue forming the edges of the

opening, the cause of failure was evident. It was directed that the bladder, by means of a double catheter, should be carefully washed out several times a day, using a large quantity of warm water, until after the next period. May 25th.—It was thought that her condition had improved sufficiently to justify another operation, which was performed without an anæsthetic, in the following manner: A point, somewhat in advance of the old line of union, was seized with a tenaculum and with scissors the cicatricial tissue was removed in a single piece about three quarters of an inch wide, so as to include the entire length of the vaginal fistula. The opening into the bladder was not enlarged, but as much of the tissue was removed as possible without doing so. A practical point was involved in not touching the mucous membrane of the bladder; apart from the bleeding as a complication, the membrane would have retracted from the edges when divided and could not be included with any certainty by the sutures, without passing them entirely through into the bladder. By doing so, or by having a denuded surface within the bladder, a nucleus would have been furnished for the formation of a calculus afterward, if the lesser evil did not present itself by the bladder becoming so disturbed with a clot, as to render it necessary to remove the sutures to arrest the bleeding. As an additional precaution, to relieve all tension, the edge was put on the stretch and a parallel incision was made on each side into the vaginal tissue, somewhat longer than the opening and about half an inch from the edge. Eleven uninterrupted silver sutures were introduced farther back than usual from the edges, so as to include a fair portion of tissue and the line when secured, was about an inch and and a half in length. A smaller number of sutures were required in this operation although the opening had been made larger. This was due to its oblong shape, allowing the edges to close naturally together, while the former being circular, could not be closed without forming on the vaginal surface a puckering fold at each extremity. To obviate this condition, it was necessary to remove a portion of the vaginal tissue at some distance beyond each extremity and to include the extended line in the sutures until the fold was smoothed down to the general line of the vagina. Without an appreciation of this condition an opening will frequently remain at each extrem-

ity of the line, the fistula having been bridged over as it were in the middle, and for the same reason it is often more difficult to close a small opening than a larger one. The operation was finished in about three quarters of an hour and with but little bleeding, as the scissors had been used entirely. After the bowels had been moved by a mild cathartic the night before, the sutures were removed on the tenth day; two days afterwards she sat up and returned home cured June 18th. Apart from the interest of this case, in connection with the literature of gun-shot wounds, it is an instructive one, from the evident causes of failure in an exceedingly simple case in other respects.

ECLECTIC DEPARTMENT.

"Floriferis ut Apes in Saltibus Omnia Limant."—LUCRET.

I.—REMARKS ON THE OPERATION OF J. MARION SIMS FOR DYSMENORRHŒA, DEPENDING ON ANTEFLEXION OF UTERUS. By J. C. NOTT, M. D., Baltimore.

But a few years ago the words Dysmenorrhœa, Amenorrhœa, Leucorrhœa Polypi, Ulceration of Os Uteri, et id omne genus, called up in my tortured brain a hideous uterine hydra, that I had been fighting unsuccessfully, with all the odds against me, and so unsatisfactory were all my efforts that I actually turned away with disgust from this class of maladies, and threw them off upon Professional colleagues. The physiology of the uterus was little known, its pathology less, and least of all did we understand the diagnosis of its endless maladies.

But thanks to the teachings of Dr. Simpson, of Edinburgh, and our countryman Dr. J. Marion Sims, a better day is dawning; an immense stride has been made in positive knowledge, and although we have yet much to learn in this department, it must be confessed, that it really begins to assume the aspect of a science instead of blind empiricism; many of these diseases, before obscure, are now easily diagnosed and treated, on fixed rational principles. The uterine sound, bi-manual palpation, Sims' speculum, sponge tents, improved position of the patient, &c., now enable us to diagnose with accuracy many important diseases that previously were merely guessed at and treated by the most vague empiricism.

As already remarked, we have yet much to learn in uterine surgery and therapeutics. All reformers, whether in politics, religion, or medicine, are prone to run into extremes, and while on the one hand they often fail to follow truth onwards in a direct line, they on the other leave behind errors to be corrected by other sober minds that follow them. Bennet ran wild on diseases of the *os and cervix uteri*, and committed excesses with his caustics. West, the representative of another school, takes the opposite extreme and attaches comparatively little importance to these affections. Then came Simpson and

Sims with the knife and sound in hand, and tell us that many of the maladies heretofore treated by caustics, washes, leeches, drugs, &c., are not to be treated without the knife. Now they are probably all wrong and all right; more light is wanted, and the *juste milieu* is yet to be sought.

I confess that I come back, after reading the works of Simpson and Sims, to uterine surgery and therapeutics with feelings very different from those which induced me to abandon this practice a few years ago. I now feel competent to diagnose and treat many cases which were formerly beyond my reach, and shall be much gratified if I can aid in calling the attention of others to the points at issue.

The first case to which I ask attention is the type of a large and troublesome class, and one which has interested me greatly.

CASE I. *Anteflexion of uterus; elongated, conical neck, and contracted os; dysmenorrhœa; relieved by amputation and incision of neck.*—Mrs.——came from the country to consult me on the 10th Dec., 1866; aged 23; been married ten months; commenced menstruating at twelve years; had no difficulty for two or three years, after which dysmenorrhœa commenced and has continued without intermission ever since, causing violent suffering for the first one or two days, and sometimes more, of each period; menstruation usually lasted five or six days, and the discharge was more profuse than natural; complexion good; general health pretty good; nervous system much deranged at the monthly periods.

Fig. 1.

On examination, the uterus was found low in the vagina and greatly anteflexed; the fundus was readily touched by the finger, behind the symphysis, and by passing the finger onwards in the vagina the os was easily reached, the neck being curved downwards and forwards. Fig 1. gives a sufficiently accurate idea of the form, size, and position of the

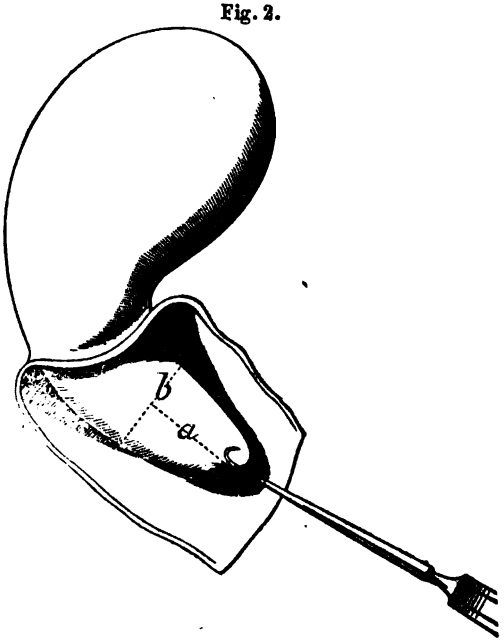
organ. The neck was small, conical, and projected about an inch below the reflection of the vagina in front and a little more behind. The os was round and small; a sound, very much curved, was with difficulty introduced a little more than two inches; the whole organ was under size. Although married about ten months had never conceived, and there was every reason to believe that both dysmenorrhœa and sterility were results of the anteflection, elongated conical neck and contracted os.

By a little manipulating with one finger in the vagina and the opposite hand on the abdomen, it was easy to work the fundus up into its normal position. As the fundus went up, the long curved neck swept down in the opposite direction, as the movements of one end of a little crooked cucumber would be governed by those of the other end. The os uteri by this movement was brought within an inch and a half to two inches of the vulva.

Having satisfied myself fully as to the nature of the case, and the applicability of the principles laid down by Dr. Sims, I, on the 17th Dec., 1866, with the assistance of my friends, Drs. F. E. Gordon and J. T. Gilmore, proceeded as follows:

The patient was placed in Sims' "semi-prone position," and fully chloroformed; the vagina being then fully exposed by Sims' speculum, a tenaculum was hooked into the interior lip of the os, which, with a very little force, was drawn down to a convenient point for operation Fig. 2.

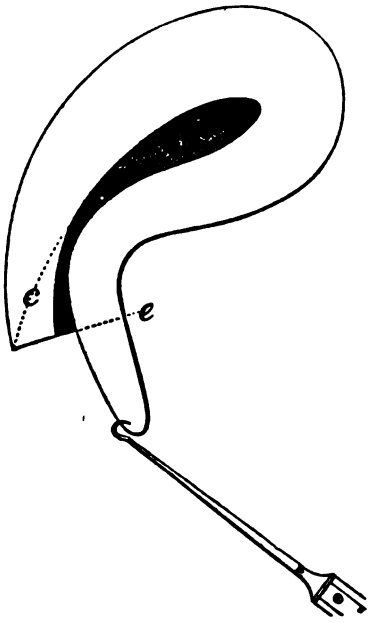
Fig. 2.



With a pair of strong straight scissors, the neck was then divided on

either side, through its entire thickness, from half to three-quarters of an inch, as seen in Fig. 2, dotted line *a*, according to Sims' "bi-lateral" method. While held in this position with the tenaculum by an assistant, as seen in Fig. 3, the *posterior* lip was seized with another tenaculum and removed at a blow with a pair of curved scissors, as seen in Fig. 3. Next, in accordance with the rule of Dr. Sims, I introduced a blunt pointed tenotomy knife into the cervical canal, and carrying it up to the superficial at the *os internum*, made an incision *backwards*, as seen in Fig. 3, dotted line *c*, superficial at the *os internum*, but extending through the entire thickness, as the incision reached the truncated margin. This last cut straightened the canal, gave an easy entrance into the cavity of the body of the uterus, and a sponge tent was introduced as seen in Fig. 4, to be left *in situ*, with the view of preventing healing by the first intention and consequent closure of internal os—see sponge tent *d* extending up into the cavity.

Fig. 3.



The operation was then completed by removing the anterior lip with the curved scissors, as seen in Fig. 3. at dotted line *e*. Fig. 4 represents the operation after it is completed: the neck amputated, the internal posterior cut made, and the sponge introduced.

Fig. 4.

A glance at Fig. 2 shows the great advantage of the small tenaculum hooked into the *anterior lip;* the traction on the anterior lip not only brings down the os, but, to a great extent, *corrects the abnormal flexion* of the organ, thus facilitating greatly the *internal* incision of the cervix and the introduction of the sponge tent.

By comparing my operation with the plan laid down in such cases by Dr. Sims, it will be seen that I have deviated in two important partic-

ulars—1st. I amputated the *posterior* lip first, instead of the anterior. 2d. I introduced the sponge tent *immediately*, while Dr. Sims usually allows several weeks to pass before using the tent.

Now a glance at Fig. 3 shows that if the *anterior* lip had been first removed, and the traction made with the hook on the posterior instead of the anterior lip, the opening into the cervix would have been *closed* and the introduction of the tent made difficult, if not impossible. By keeping a firm pull on the anterior lip, after the posterior one is amputated, as in Fig. 3, the channel is pulled open and the tent slips in with the greatest facility. The internal cut backwards is also rendered very easy by the traction on the anterior flap.

Dr. Sims does not introduce a tent *at the time of this operation*, and tells us that one of the objections to his operation, and difficulties to be contended against, is the tendency of the cervical canal to contract again in spite of his internal incision. To overcome this contraction he tell us that a second operation is usually necessary by incision and tents; so great, in fact, is the tendency to contract that not unfrequently the cutting and tents have to be repeated several times.

Fig. 4 represents the uterus after the amputation of the neck is completed, the internal incision made, and the tent introduced.

All the above steps of the operation are easily and quickly accomplished, but I must now call attention to an oversight, for which I deserve censure. When, after the bi-lateral incisions were made, the posterior flap was cut off an artery was seen spirting from the truncated surface.*

I might then (as the uterus was firmly held by the tenaculum in a very convenient position) have easily ligatured the vessel; but never, in any amputation of the cervix uteri, having had troublesome hæmorrhage, I did not, with the *liquor persulphas ferri* at hand, anticipate it here. Without waiting for the arrest of hæmorrhage, I cut off the anterior flap at once and depended on the tampon. A wad of cotton, saturated with one part of the iron to three of water, was thrust down to the bottom of the vagina, and dry cotton packed in on this to hold it in place. In spite of all this, hæmorrhage continued to such an extent that I thought it prudent, at the end of an hour, to remove all the dressings and coagula; a bivalve speculum was introduced; the vagina thoroughly sponged out and again carefully and tightly tamponed with the iron and cotton.

Still the blood continued to trickle slowly through the cotton for two hours, and symptoms of prostration became so marked as to make me uneasy. I then resorted to the following expedient: A glass syringe with a long nozzle charged with four ounces of the persulph. ferri, diluted as above, was inserted deep down, beside the cotton, to the bottom of the vagina, and the whole contents gradually driven in; I then placed my hand on the vulva and pressed firmly for a few minutes, so as to retain the injection and give time for coagulation of the blood. This produced the desired effect; and the hæmorrhage ceased; the patient soon reacted, and by nine o'clock at night (eight hours after the operation) she was well enough for me to take my leave for the night

without further anxiety. It had been necessary during the evening to give her opium and brandy.

18th. In satisfactory condition this morning; did not sleep much during the night; was a little nervous; pulse good, and is quite cheerful.

20th. Has continued well; no pain or fever; takes plenty of nourishment and sleeps well.

The extension of the vagina from the tampon and coagulated blood has been a source of a good deal of uncomfortable feelings, and to enable her to pass her urine, the part of the cotton and coagula in front pressing on bladder and urethra were removed the morning after the operation. The vagina was as completely filled by the cotton and coagula as it would have been by the head of a fœtus at term. The coagula too made by the persulphate of iron are as hard as cheese. By means of a spoon-handle I prized out part of it yesterday, and the remainder to-day, together with the last of the cotton, and the sponge tent, which was found loose in the vagina. She was greatly comforted by the removal of this mass, and a free washing out with tepid water and cloride of soda. No examination of uterus yet made.

29th. Has progressed well in every respect since last report; requires no treatment but ablutions with tepid water and Darby's prophylactic; has been sitting up and walking about the room comfortably. Has had for two days previous to yesterday a little bloody discharge, *without any pain*, which was doubtless her catamenial flow, though less than usual in consequence of the recent hæmorrhages she had undergone. Examined the os uteri with speculum and found the cut surface covered with healthy granulations and healing well. Permitted to go home with the injunction to return to Mobile by the 15th Jan., being two or three days in advance of the next menstrual period.

Jan. 19. Arrived in town yesterday looking and feeling well. On examination I could detect neither anteversion nor flexion; the position of uterus seemed normal; the os *in situ*, with a patch of granulations about the size of the little finger nail, not yet healed over. *Catamenia came on last night moderately, naturally, and without the slightest pain*, and this morning I found her walking about the room and anxious to go out shopping.

25th. Catamenia ceased on the fifth day, having passed through without discomfort. Discharged and sent home: apparently perfectly cured, except a little speck of granulations which will doubtless heal in a few days; directed to use with a syringe night and morning a heaping tablespoonful of common salt to a quart of water. I may here remark that this is one of the most invigorating and soothing washes for the vagina I know, and this idea was taken from an article in the London *Lancet* by Dr. Thudichum on injections of the nostrils; he found the salt and water much less irritating to the Schneiderian membrane than simple water, and this I have proven again and again in ozœna.

I repeat that the above case is typical of a large class that heretofore have been incurable, I feel assured that, if properly managed, it will

bring relief to many whose lives are passed in suffering.—*American Journal of Medical Science.*

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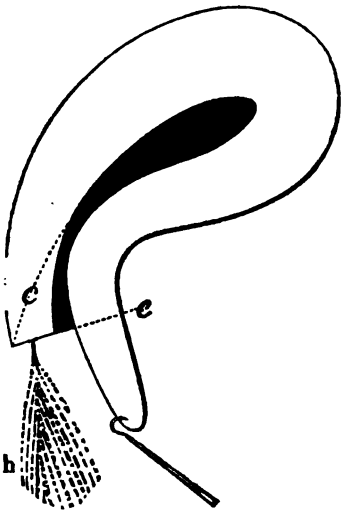
* The following is an extract from a letter from Dr. Nott, August 1st, which we insert as further illustrating his meaning as well as the additional cut No. 5.—EDS. ST. LOUIS MED. REPORTER.

Dr. O. F. POTTER;

Dear Sir—The enclosed cut No. 5, will further illustrate my meaning in article above. By this you see that the artery spouting (Fig. 5 *h*) is from the *truncated flap*. There was no hæmorrhage from the *internal cut*, (Fig. 3 *c*.) As stated in article above I saw the artery (Fig. 5 *h*) spouting from the *truncated surface*, and ought to have ligatured it at once, but having never had troublesome hæmorrhage in former operations for amputating of the neck, I omitted the ligature, or rather thought it unnecessary in the present case, in which opinion I was mistaken. I have never had at any time troublesome or alarming hæmorrhage from the internal cut, or from the division of the os internum, and should such hæmorrhage occur at these points, I think its arrest would be certain by the use of the sponge tent, and then fixing in situ by the cotton tampon soaked in the *liquor persulphas ferri*. Such, at least, has been my universal experience.

Fig. 5.



II.—THE RELATION TO GENERAL MEDICINE OF THE DISCOVERIES AND ADVANCES OF OPHTHALMOLOGY DURING THE LAST DECADE.

Messrs. Editors,—The following remarks of Professor August Rothmund, of Munich, show so clearly the relation to general medicine of the discoveries and advances of ophthalmology during the last decade, that for the benefit of your readers I have translated them from the *Vienna Weekly Medical Journal* for Feb. 26, 1867.

Respectfully yours, B. JOY JEFFRIES.

When any great and remarkable discovery has been made in some

one department of natural science, history shows that it has always had a permanent and reforming effect upon the allied branches. And we find, also, in medicine, that when particular parts of the science are at times cultivated, a favourable impulse is given to the others. In the following *résumé* I shall endeavour to show how the recent advances in ophthalmology may be turned to account in general medicine, and looking for this purpose at the separate parts of the eye, it will be readily seen that the very latest discoveries deserve from general medicine the fullest consideration.

Let us commence with the retina and optic nerve. A true knowledge of the diseases of these organs dates back to the invention of the ophthalmoscope, as it is only by the help of this instrument that the retina and optic papilla can be seen in the living human being. We may regard the retina as an outpost of the brain, a portion projected to the surface, completely open to observation. We can moreover, see the entrance of the optic nerve, the only one of the nerves of sense exposed to view in the living organism. It naturally, therefore, occurred to the observer, soon after the invention of the ophthalmoscope, that certain central affections would cause material alterations in the optic nerve and retina, and allow us to deduce from them the nature of the cerebral affection. At the very first, attention was called to the whitish, tendon-like colour of the optic papilla following cerebral amaurosis; soon, also, it was seen that encephalitis and meningitis, especially the basilar forms, could be readily connected with neuro-retinitis, in which the nerve is swollen and the retina often hyperæmic, infiltrated and cloudy. It is, however, cerebral and orbital tumours which especially produce, by pressure on the optic nerve, changes in its histological condition. In such cases, the ophthalmoscopic appearances are, the so-called mechanical hyperæmiæ of the papilla (tortuous, swollen veins, prominence and grayish discoloration of the papilla, often associated also with hæmorrhagic collections in the retina). In the *meningitis cerebro-medullaris* which lately visited some parts of Bavaria, a blindness not unfrequently occurred, in which the ophthalmoscope showed neuro-retinitis and diffuse retinitis, with sometimes plastic, sometimes purulent exudation often connected with paralysis or with subsequent iridochoroiditis.

Important as are these objective conditions in cerebral diseases, the subjective appearances in the eye deserve equal attention, and among these especially the manner in which the field of vision is contracted in commencing blindness. Since attention has been carefully directed to this latter, namely, in commencing amblyopia, and not only the acuteness of vision but the perceptive power of the peripheral parts of the retina been diagnosed, we have very greatly advanced in the precise diagnosis and prognosis, and also arrived at a rational starting point in the treatment of these diseases. To mention a striking example, it has long been known that many affections of the brain are associated with hemiopia; we know also that the optic nerve fibres cross at the chiasma, and although there is still much dispute in reference to the method and manner of the decussation, and the course of the separate fibres is not

yet fully known, yet it is quite clear that the right optic tract sends one portion of its fibres to the *right*, and a considerable also to the *left* eye. It is likewise true that the fibres from the *right* tract going to the *right* eye run principally on the outer side of the right optic nerve, and those which go to the left eye are on the inner side of the optic nerve. There is an analogous condition of the fibres from the left optic tract, i. e., the right optic tract supplies the right half of both eyes, whilst the left is supplied by the left optic tract. From this anatomical relation, it may be readily clinically deduced that in those forms in which the external field of vision on both sides is defective, and correspondingly the two *internal* halves of the retinæ not sensitive, the difficulty, whether a tumour, exudation of extravasation, must lie in front of the chiasma; moreover, that in hemiopia, when the right or left halves of the retinæ are incapable of transmitting impressions, the corresponding right or left optic tract being affected, the difficulty must be behind the chiasma.

In Bright's disease, the changes in the retina deserve attention. Landouzy, Frerichs and others had long ago noticed the marked trouble of vision in this disease. But these early observers attributed it to imbibition of urine, whilst the invention of the ophthalmoscope has proved material changes in the retina so characteristic of the affection, that cases not unfrequently occur in which the trouble in the kidneys is diagnosticated solely by these alterations. The ophthalmoscope shows us white or dirty white opacity of the retina, first round the optic papilla. The peripheral edge of this opacity appears in many cases irregular, jagged, terminating in small white detached spots. The vessels are gradually surrounded by this white exudation so that only portions of them are visible. The nerve generally appears swollen and projecting. Groups of white points are seen in the region of the macula lutea connected together by prolongation. Besides these we have larger or smaller retinal ecchymoses. We may therefore consider the disease a retinitis apoplectica recurrent and insidious, causing change of tissue in the parts affected. Subjectively the patients complain of weak and clouded vision, the field exhibiting interruptions rather than contraction. Although there is no doubt of the connection between the shrinking of the kidneys and the retintis, yet each affection is somewhat independent of the other, in that the retinal changes and accompanying difficulty of vision may partly or wholly disappear, whilst the trouble with the kidneys progresses. Although amblyopia accompanying morbus Brightii is generally dependent upon retinal difficulty, yet cases occur where the dimness is due to uræmic imbibition. Retinal trouble comes not only with diffuse nephritis, but also with amyloid degeneration, as Traube and Beckmann have shown; in the majority of the cases, also, disease of the heart may be found, namely hypertrophy of the right ventricle.

The so-called *retinitis pigmentosa*, characterized by deposit of black pigment in the retina, causing slowly progressive contraction of the visual field, and with appearances of hemeralopia leading nearly always to blindness between the 40th and 50th year, deserves here our attention, since Liebreich has shown that the disease especially effects chil-

dren of parents who are blood relation (40–50 per cent.). I noticed long ago that this affection was seen almost exclusively among the Jews, which is now readily explainable by the frequent marriage among them of blood relations. Irregularities in the retinal vessels are found moreover in disease of the heart, in anæmia and leukæmia; and whilst in the former the veins especially are dilated and varicose, in anæmia and leukæmia there is such a lack of blood as to produce dimness of vision. I reported a case a few years ago, where sudden blindness having been caused by anæmia, I succeeded in restoring sight by paracentesis of the globe. A. von Graefe, Jun. obtained the same result in a similar case by iridectomy.—Apoplexies of the retina are not uncommon, either spontaneous or traumatic, or finally accompanying inflammations. Although absorption takes place rapidly and vision quickly returns after the sudden blindness, yet the prognosis of apoplexies is very grave, as they are only too often the forerunners of subsequent *cerebral* apoplexy. I can recall several people who had consulted me for scotoma in the visual field of sudden partial or complete blindness, and shortly afterwards died of apoplexy; retinal apoplexies, therefore, deserve our fullest consideration. Embolus of the main trunk or a branch of the central artery and consequent complete blindness or contraction of the field of vision has been often noticed, and in rare cases the gradual disappearance of the plug very perfectly observed with the ophthalmoscope.

In secondary syphilis, also, we find affections of the retina, and if the appearances in this retinitis are not perfectly characteristic of syphilis, yet the ophthalmoscope shows with certainty that the retina may be affected in secondary syphilis without the choroid participating. The prognosis in such cases is quite favourable, and I have generally seen in the majority of cases a complete restoration of vision in from six to eight weeks under an antisyphilitic treatment. Zehender says correctly; "Idiopathic affections, especially inflammations of the retina, are very rare. The large majority of all retinal diseases are rather due to interruptions to the general health, namely, irregularities in the circulating system, heart or kidney troubles, syphilis, &c., or they occur from local changes or injuries in the choroid or vitreous. Whilst modern ophthalmology in opposition to the old school has sought to group the forms of the diseases of the eye in accordance with their anatomico-pathological appearances, and do away with names drawn from the dyscrasiæ which were their presumptive cause, to return, especially in retinal diseases, back again to the school of dyscratic ophthalmic diseases. Experience with the ophthalmoscope has convinced us, and each day more clearly, that certain retinal affections dependent upon general disease may appear so characteristic that the latter can be safely diagnosticated by ophthalmoscopic examination. Such experiences, where the ophthalmoscopic result gives almost positive symptoms of the general affection, lead naturally to a nomenclature which cannot neglect the close connection between the local ophthalmic disease and the general malady." There are, nevertheless, cases of blindness in which the objective appearances on the brain and in the optic nerve are

nagative, and we are reduced to very doubtful etiological data. I would recall here amaurosis from the abuse of tobacco (nicotine amaurosis), lead disease, after the use of quinine, in disturbed menstruation, hæmorrhages of the stomach, suppressed habitual hæmorrhages and other excretions. It is interesting to notice, also, that cerebral amaurosis is much more frequently observed in men than women.

As to the choroid, the majority of its affections are not associated with derangement of the general system, and are therefore to be omitted from our résumé. That the choroid is frequently affected in syphilis has been long known, not, however, that it participated in every inflammation of the iris. A peculiar form of choroiditis, known under the name of disseminate, is regarded by many as a positive sign of secondary syphilis, which I however much doubt, as I have had several cases in individuals where no thought of syphilis could be entertained, and who showed no other symptoms of the disease. *Tubercular* infiltration of the choroid has been mentioned by Manz and Jäger. The tubercles appear as grayish white round bodies, of the size of a linseed to that of the diameter of the papilla and over, sharply cut against the fundus, and appearing in large groups; they are always observed in connection with general miliary tubercle, and where, therefore, the diagnosis lies between typhus and miliary tubercle, this fact may be of importance to the pathologist.

In this connection, I would make a few remarks with regard to the *relation of glaucoma arthritis*. It is a recognized fact that glaucoma occurs principally in arthritic persons; the older authors, therefore, in time of the general crases school, called it choroiditis arthritica. Modern times have shows glaucoma to be an extended inflammation of all the internal organs of the eye, dependent upon venous hyperæmia, coming on with marked increase of intraocular pressure, leading to excavation of the optic papilla, and showing a great tendency to degenerative atrophy of the parts within the globe. This view that glaucoma is principally due to increase of intraocular pressure has led, as we know, to the remedy for this heretofore incurable disease; for by iridectomy we can, as von Graefe has proved, lessen the pressure. Although we have regarded glaucoma as a local process, the local treatment employed being most completely triumphant, yet it remains nevertheless very noticeable that the arthritic person is especially attacked, and it seems probable that some peculiar relation must exist here. I think that the cause is the condition of the sclerotic; all fibrous membranes are, in arthritic people, by deposit, rendered more firm, harder, inelastic, and thus in such an inelastic sclera the slightest choroidal congestion increases the pressure within the eye; whilst in a more yielding membrane a transient congestion is equalized by stretching. A proof of this may be that in young persons with elastic sclerotics glaucoma does not occur; moreover, in myopes, where, as we know, the sclera is thin and bulges posteriorly, and is therefore more yielding, glaucoma is much more seldom observed than with emmetropes and hypermetropes.

Another disease has been described under the name of choroiditis

pyæmica. Namely, cases of purulent ophthalmia in the course of purulent fevers; for example, in puerperal women with childbed fever, formerly called metastasis of milk. This disease being most generally with a choroiditis and rapid deposit of exudation in the vitreous, quickly followed by panophthalmitis, and ending, if death does not sooner occur, in an atrophy of the globe. To these remarks on affections of the choroid I may add, that the inflammations of this membrane are much more dangerous than those of the retina; the reason being that the retina is readily loosened by exudations, or at least the basilar layer adjacent to the choroid is altered whilst retinal exudations, even when considerable, protrude into the vitreous, and may then become absorbed without further damage.

In choroidal diseases we saw that certain processes are not only to be referred to so-called dyscrasiæ, but that mechanical alterations had also great influence upon them; now in reference to inflammations of the iris this is still more marked. It is well known that these frequently occur in patients with syphilis, and more especially the pustular form. Yet with this disease the iritis is not so characteristic that we can determine from it alone the dyscrasia in question. It is certain that there is scarcely a disease which relapses so readily and so frequently as this, and the old practitioners are right, therefore, in referring the cause of the repeated iritis to the continuance of the syphilitic affection. Yet for the majority of cases this is not quite true, since we know that in iritis the exudation primarily and principally affects the edge of the pupil, producing therefore very readily adhesions between the anterior capsule and the iris at its pupillary margin, so-called synechiæ. As now the iris consists of movable muscles, such attachments must cause constant stretching, producing irritation, inflammation, new adhesions, and so closure or obliteration of the pupil. Proof that this purely mechanical condition, and not the present dyscrasia, causes such inflammations is, that an iritis once having caused adhesion readily recurs, the oftener and the quicker, the broader and more numerous these adhesions. Moreover, inflammations of the iris which do not leave synechiæ rarely relapse; finally, when we, by freeing these connections by operation (iridolysis), or cutting out a piece of the iris (iridectomy), prevent the injurious stretching, further relapse do not occur. Hence the primary therapeutical indication in iritis is frequent use of atropine drops, either to prevent, if possible, the synechia, or if it has occurred, to loosen it by treatment or operation.

Careful observation of the transparent media of the eye, the cornea, lens and vitreous humour, gives us important data in reference to diseases of the general system. First of all in the *cornea*, inflammation is not alone dependent upon the presence of the vessels, and hence keratitis is worthy of special study. By the name of neuroparalytic keratitis, is understood a suppurative inflammation of the cornea occurring after section of the trigeminus nerve in animals. Similar suppuration of the cornea has been seen in man in cerebral disease, principally intra-cranial tumours. The symptoms are, rapid clouding of the cornea, sudden deep necrotic ulceration, causing its complete destruction. Hence it

has been supposed that the fifth nerve stood in direct relation with the nutrition of the cornea. Later experiments by Snellen and Donders have given another interpretation. According to them, the destruction of the cornea depends upon its insensibility after section of the trigeminus, so that no external foreign bodies, as dust and hairs, &c., are felt and therefore lie upon it; moreover, accidental blows, scratches, &c., are not perceived. From this irritation the inflammation of the cornea proceeds. If, after section of the fifth nerve in an animal, we sew the lids together and thus protect the cernea, this destruction takes place very slowly, blows of course not being prevented; sewing the long ear of the rabbit, supplied by other sensitive nerves, over the eye after section of the trigeminus, will, according to the above authors, entirely prevent the destruction.

Winther, who has made extended experiments in this direction, says, 1st. Sewing a protection of muscle or skin over an eye whose trigeminus has been cut, prevents inflammation and opacity so long as it remains. 2d. After loosening or removing the cover, the inflammatory symptoms appear; more slowly and milder the longer the time after section of the trigeminus. According to Winther, these two facts, that after section of the trigeminus (1) inflammation of the eye always occurs upon exposure to the air; (2) inflammation never occurs when the eye is protected, seem adapted to throw some light on affections resulting from cold, a nd will be perhaps points of departure in experimentation upon what is called the rheumatic diathesis Cases of the keratomalacia have been seen in epidemic cerebro-spinal meningitis. Niemeyer records several cases in which a keratitis commenced with injection and muco-purulent conjunctival secretion from the eye, leading in a few days to keratomalacia and hypopion, and refers it to a purulent basilar meningitis extending to the neurilemma. Schirmer, on the other hand, explains this circumstance by the traumatic injury to the cornea from insufficient closure of the lid, the patients in their comatose condition not closing the eye completely, so that dust and other foreign bodies can enter the palpebral aperture unhindered. We may in the same way explain ulceration of the cornea in typhus, tuberculosis and meningitis, without having to assume an injury to the 5th nerve. Whether the corneal disease which is comparatively frequently associated with the exophthalmos in the severer degrees of Basedow's disease, is due to the lack of protection and moisture, is still doubtful. Yet the course of the affection, as Græfe has observed, resembles the keratitis after section of the trigeminus, assisted perhaps by the stretching of the ciliary nerves from the rapid displacement of the point about which the eye turns, or compression of the nerves by distended vessels, or hypertrophy of the adipose cellular tissue. The favourable result from enlarging the palpebral aperture in this disease seems to support this view.

The causes in general of the frequent *opacities of the lens* have not yet been discovered, as we have no dyscratic influences to refer cataracts to, or local influences, except direct injury, and over-exertion of the eyes; von Walther's proposed theory of inflammation also meets with

no general acceptance, although since, lately, Virchow has taught that inflammation may occur in a nonvascular organ or one which derives its support from a distance, Donders has observed some very acute anomalies of nutrition in the lens. It can only be safely said that opacity of the lens occurs frequently after long continued choroidal disease; I would simply mention here the frequent occurrence of posterior polar cataract in staphyloma posticum or excessive degrees of myopia. A remarkable fact is the relative frequency of cataract in diabetes, and also the appearance of cataracta zonularis, so called lamellar cataract, in children with rachitic dental structure, hydrocephalic heads, or those who have had frequent convulsions. Arthritis does not seem to stand in any direct relation to cataract. Since we have been able to recognize a commencing cataract with the ophthalmoscope, all reports of curing cataract by internal remedies, such as mercury, iodine, antimony, &c., have gradually disappeared from literature. That the lens becomes harder with increasing age and therefore the near point of the eye recedes, is a fact long known; not so, however, that this, in the normal eye, is so progressive a process that from the number of the glass used for near work the age of the individual can be determined, as has been shown by Donders.

With the same right as with the lens, we may speak of an inflammation of the *vitreous*, a hyalitis; this is, however, connected with inflammation of the retina and optic papilla. The exudations are sometimes purulent, sometimes of fibrous character, and often so excessive as to displace a greater part of the vitreous. Cysticerci in the vitreous excite our special attention here. It would seem as if they came in to the vitreous after perforating the retina, and their origin was in the latter or the choroid. Since we know from Siebold, Küchenmeister and Leuckart, that the general cause of the presence of chains of tapeworm and cysticerci, is the use of raw flesh, we can understand why these parasites are so commonly observed in North Germany, whilst they are but rarely met with in South Germany.

The *conjunctiva* affords us much worthy of observation in reference to affections of the general system, since the crasis theory has been dropped and the affections of this membrane have been classed according to the laws of inflammatory products. With the exception of trachoma, an affection peculiar to the mucous membrane of the eye, we find in the conjunctiva the ordinary processes of mucous membranes, such as catarrh, blennorrhagia, diphtheria, and herpes in the so-called syndesmitis phlyctænulosa; and this division is of great value, since in each of these inflammations different remedies are known to be beneficial. For instance, the caustics almost abort blennorrhœa of newborn infants, whilst in diphtheria they only do harm, and I cannot understand how they are useful in diphtheria of other organs, for instance the fauces and larynx. Military ophthalmia is now generally conceded not to be a specific disease, but partly a catarrh, partly a blennorrhœa, generally though a trachoma, and caused in the majority of cases by the over-filling of badly ventilated localities.

The diseases of the *muscles* of the eye have special interest for the

neuropathologist, for commencing cerebro-spinal trouble very often first makes itself known by difficulty in the ocular muscles, and double vision is often the first symptom of the disease. Complete oculomotorius paralysis we may refer to a cerabral cause, whilst partial paralysis very rarely can be done so. I may recall in this connection the crossed double images of drunken persons, and the divergence of the optic axes in chloroform sleep. We know that very various affections of the brain may produce such paralysis of the oculomotorius, but syphilis seems to be a very frequent cause. According to von Graefe's observation paralysis of accommodation with mydriasis is sometimes the forerunner of mental affections, especially when the former is transient, frequently recurring and affecting the two eyes alternately. The so-called diphtheritic paralysis is more interesting here, occurring often after diptheria of the fauces and causing especially paralysis of accommodation, occasionally combined with paralysis of the soft palate and œsophagus. This paralysis comes on always a few weeks after the cure of the local diptheritic affection. Very little is known in regard to the natnre and causes of this paralysis, as Nagel says, we do not even know whether they are central or peripheral. On the one hand it is thought that the alteration in the mixture of the blood associated with the general disease, causes morbid processes in the central organs of the nervous system; on the other hand many cases of unilateral paralysis with unilateral throat affection speak for a local extension of the trouble from the periphery; finally, Zenker, who has seen the same degeneration of the muscles in typhus and in diphtheria, attributes a myopathic origin to diphtheritic paralysis. Müller's hypotheis seems to be little supported, namely that the frequent paralytic ocular affections are due to the extension of the morbid process from the palatine nerves, through the nervous filament running from the spheno- palatine to the ciliary ganglion, which filament Hyrtl considers fibrous. As we know, the course of diphtheritic paralysis of accommodation or of the muscles of the eye is favourable, and followed in a few weeks by complete restoration. (Nagel.)

We have thus reviewed all the seprrate parts of the eye, and seen how each is associated with affections of the general organism.—*Boston Medical and Surgical Journal.*

III.—Certain Prominent Relations Between Materia Medica and Therapeutics. Remarks of Dr. E. R. Squibb, at the New York Journal Association, May 16, 1867.

Gentlemen: I thank you for the privilege of suggesting to your minds a train of thought on a subject which may be more familiar to me than to you, and one which can hardly be followed up without

profit. The subject is one which for many years past has occupied much of my time and thought, and enlisted my best efforts, with but little success. This circumstance, taken in connection with the natural tendency of a warm interest to over-estimate and over-rate influences, must make you cautious in receiving what I may say in a rambling discourse on some of the prominent relations which exist between materia medica and therapeutics, and the bearing of these relations on the general welfare and progress of practical medicine.

You remember, materia medica is that department of medical science which treats of the material of tools with which the physician meets disease in the practice of his art. Therapeutics is more properly, perhaps, the application of the materia medica to the treatment or cure of disease. The prominent relation between these, which I desire to present, is simply that of cause and effect. And it is to having lost sight, to a certain extent, of this relation, that the profession owe a part of the loss of hold upon the community at large, and this loss to the regular profession constitutes the entire gain of quackery and empiricism. The study of the science of medicine and the practice of the art of medicine are two very distinct things. The community recognizes the art; the profession and the scientific world alone recognizes the science. The practical object with which the science is pursued is the practice of the art, and that alone brings it into direct connection and relation with the community. The community at large value the profession of medicine, perhaps only by the results which are attained. If the profession of medicine fail to cure or alleviate disease, they must expect in a proportionate degree to lose their hold on the community. The legitimate materia medica and not expectantism nor skepticism, more than polypharmacy, empiricism, or any other form of ignorance, must constitute the means by which the practical end is attained, and therefore must be the foundation of every sound and lasting medical reputation.

This practical view of the subject has not, for many years past, attracted that attention in the schools and among medical men, which, in my judgment, it deserves. While great pains are taken to teach anatomy, physiology, pathology, and all the other subjective branches, the aim and whole object of the science, viz., the *application* of the art, is too much neglected. This is seen, I think, in a kind of skepticism that is growing up in the profession, as to the reliance to be placed on drugs in the treatment of disease. I am no very great believer in drugs, but that there are certain effects produced by remedies, none can doubt. Many say, that apart from the three or four prominent articles of the materia medica, they can

put no confidence in it. This leads the community at large to feel the distrust which the profession itself seems to feel—a want of power to meet and combat disease by other than simple mechanical means.

Mechanical art, applied through the science of medicine, is more successfully cultivated and is more practised. We very often hear of successful surgeons, obstetricians, oculists, and aurists; but very rarely of a successful therapeutist. Hardly ever does a man become prominent for his practical application of the materia medica to the cure of disease. In the vast and rapid accumulation of human knowledge, disease is far better known than how to cure it. This is what I complain of; and this is the train of thought to which I desire to direct your attention, since the corrective is within reach by the old and only road of labour, through increased study and observation applied to the materia medica.

Very few of the important advances that have been made in materia medica for years past can claim to have been discoveries; almost all have been stumbled upon. It was reserved for Horace Wells, a dentist of Hartford, to discover modern anæsthesia, though the road was pointed out to the medical profession years before by Sir Humphrey Davy; and the agents now successfully used were all previously known. Ether, the most important of these agents, has occupied a place in the materia medica certainly since the fifteenth century, and yet its most important power has laid dormant through want of proper investigation and research. I ook at bromide of potassium, as another example, now very much and very effectually used as a peculiar nervous sedative. As long ago as 1828, Pourché experimented with bromide of potassium, yet from that up to the present, the profession has been stumbling and blundering with it, without discovering its prominent characteristics or uses; and not until within three or four years past, has it been generally admitted to be a nervous sedative at all.

These serve as illustrations for a point that I wish to make, viz., had the proper amount—or the same proportional amount—of study been given to either of these agents that has been given to the pathology and diagnosis of Bright's disease, the present knowledge would have been acquired by the profession long ago, much human suffering would have been saved, and the medical profession would have been better established upon its true basis.

Even at the present day, the best known articles of the materia medica are lying about, as it were, loose, for want of research and critical examination. Gentlemen will take the microscope, and pursue a pathological change with the utmost zeal and energy, and by patient observation and reasoning, will get out of a given sub-

ject all that it contains. Why not do so with the articles of the materia medica? Many well informed professional men will permit themselves to be led to false conclusions in regard to the materia medica upon grounds which they would utterly reject in other departments of medicine; and in the use of remedies, too often and too easily yield to the plausible ingenuity of the chemist, the polypharmacist, or to the equivocal knowledge which their apothecaries offer them.

Out of this loose and indefinite knowledge, or want of knowledge in regard to materia medica and therapeutics, grows a taste for fashion and novelty in remedies scarcely less than that which characterizes ignorance and frivolity in dress. A remedy is set forth as a novelty, and sometimes from mistaken zeal or superficial observation, but more commonly from the dexterous management so well known to trade in fashions and novelties, it gets "a good run," and often runs out into oblivion. Its few legitimate uses are so confounded with its many abuses and misapplications, that they cannot save it. Illustrations of this are always at hand. Now codeia becomes fashionable, then narceia, and loose extravagant representations are hung around them as fashionable garments, and they go forth for their short career in the progress of medicine, until some one like Eulenburg makes some laborious and patient investigations "in a great number of painful affections," and "recognizes in this medicine, as an anodyne and narcotic, a substitute for morphia, which is perhaps equal to morphia in all respects, and which may even be preferred to morphia in a certain number of cases." (*Bull. de Thérapeutique.*) In these instances, as in many others, the fact was entirely lost sight of, that had these substances been really new, which they were not, or had they possessed half the advantage claimed for them in use, there was no possible source of supply for them. Derivatives of opium only, that drug yields them in so small a proportion as to be entirely inadequate to supply any general demand for them. Then as the fashion soon exhausts the only source of supply, the substance advances in price until the temptation becomes too strong for the channels of trade, and subiletation and falsifications from manufacturers meet the demand, adding an additional cause to the rapid decline of a fashion, and one which the medical man is often the last to suspect. This same want of accurate knowledge and forethought not only favours the objects of smart money-making manufacturers and pharmaceutists, who study the materia medica much more closely than medical men, but it also favours a kind of medicine-made-easy through ready-made complex formulæ.

Take as a familiar example, the now much used syrup of the

phosphates of iron, quinia, and strychnia, of Dr. Eustere, as given by Aitken. This, if there were no objection to it beside, is a fixed inflexible combination of these potent agents, which may fit tolerably well upon a small class of cases, just as ready-made clothing may fit a class of persons near the same size, but it never can closely, or nicely, or scientifically be applicable to more than one case, if critical discrimination be used. Now at the same time that not one of the ingredients in this complex syrup is new, nor is the association of them in treatment by any means new, yet a single pharmaceutist in this city is now dispensing the syrup at the rate of half a gallon a day, upon physicians' prescriptions, whilst it should be the case, if it be not so, that any one of these physicians is fully able to prescribe these potent agents in a way less incompatible than this syrup is, and in a proportion far better adapted to the varying indications to be met by the judicious and scientific uses of iron, quinia, strychnia, and phosphoric acid.

Fashions in therapeutics and pharmacy, like fashions in everything else, are too apt to debase the good sense of those who yield to them.

Among the prominent relations between the materia medica and therapeutics, is that which is embraced in the domain of pharmacy;—pharmacy being the art of preparing the materia medica for successful application. This art, though now founded upon a science of pharmacy, is commonly followed as a mere trade to get money by, and the common axiom of trade, whereby success is sought for mainly through buying cheaply and selling dearly, has a constant adverse tendency upon the best interests of practical medicine. Want of knowledge of the materia medica and pharmacy in the profession of medicine, leaves these tendencies of trade uncontrolled, and the physician becomes often the dupe and sometimes the pliant tool of the sharpness and shrewdness of over competition in the muddy stream of common trade. Few physicians are equal to the successful pharmacists with whom they are brought into daily contact and dependence, either in the subtle artful resources of successful trade, or in the absolute knowledge of the materia medica, which is necessary to successful trade, and hence physicians are constantly and habitually misled and misguided by accepting their knowledge of the materia medica second hand, and after contact with competing trade. The materia medica of the shops, and that of the pharmacopœias, is as different as the difference between mere pecuniary interest and true intrinsic value in other classes of merchandize, and the knowledge which will distinguish between a good piece of cloth and an indifferent one, or between a good barrel of flour and a bad one, is all that I ask for cinchona

barks and all the prominent articles of the materia medica; and unless the medical profession will cultivate this knowledge with more zeal and energy, it must accept the inevitable alternative of quackery and empiricism triumphant, and much human suffering badly controlled; and this is but the old story of the immutability of the natural laws which govern human nature through its instincts of self-preservation.

In these times of prominent use of tonics, who does not prescribe cinchona, or its derivatives, in some form? And yet it is not ascertained, or even much agitated, whether its alkaloids are better tonics in their natural combinations, or after the unnatural torturing, and bleaching, and re-combining which they get at the hand of the chemist. The fact that one of these alkaloids is more anti-periodic than the others, and that for such uses it is better to have it in a definite quantity and small compass, does not at all prove it a better tonic, while good reasoning, and ordinary intelligence, supported by a majority of what little good authority is to be found upon this point, all tend to favor the opinion that all the alkaloids are useful tonics, and perhaps equally useful, and probably most effective as tonics, when in their natural combinations. This granted, a very moderate amount of thought will show the physician that every grain of quinia salt which he uses as a tonic, without good reason for his preference, involves the expense of its extraction, and all the profits that must be put upon it before he can get it,—the risk of its adulterations,—and far worse, the sacrifice and almost absolute loss of the other alkaloids of the bark from which it has been extracted since they are comparatively valueless when broken up from their natural combinations. Here, then, is a positive waste, either through want of knowledge, or want of thought, and a waste whose importance is easily appreciated when it is remembered that the forests of all the more valuable species of cinchona are being rapidly exhausted, and their barks becoming rare and costly, and displaced in the markets by inferior grades, and by false barks.

Here, again, true and accurate professional knowledge and study is indispensable and much needed. These cinchonas are brought to the markets through ordinary commerce, and are passed through the exporter, the importer, the broker, the drug miller, and the druggist, to the pharmacist, and the physician sees them, if at all, in the form of tincture, elixir, syrup or extract, when all the landmarks of character and quality are gone forever. The man who dispenses the preparations has taken the place of all these, and he is a merchant, whose prime object is profit, and who, instead of making his preparations, has bought them of those who could make them cheaper than he. These cinchonas, in powder, at the drug-

gists or pharmacists, are, except for differences in colour, so much alike that an experience of fifteen years, with much interest in them, and an ordinary amount of attention and intelligence, has taught me to distrust my judgment almost entirely, and to rely only on actual examination. Now this examination is both simple and easy; but what physician or pharmacist ever applies it? It has been long stored in the written accumulations of knowledge, and is always accessible, but rarely taught or thought of. The powdered barks are chiefly classed as "red" and "yellow," and if a superior price is desired for the "yellow," it is called "calisaya." The price of these barks in the market varies between sixty cents and three dollars per pound, and all intermediate prices are charged for articles of almost exactly the same appearance, and we are all entitled to our own inferences as to how many buyers are likely to select the higher cost for articles which appear to be the same. Under such circumstances—and this is but a prominent example of many such—where can there be any safety for the medical profession short of the acquisition of knowledge, and its laborious application, just as it is to-day attained and applied in the admirable and invaluable investigations in pathology. The fields are the same in extent, the harvests equally abundant, but the laborers are unequally distributed, and the results proportionately unequal. If so important a branch of medical science as that which, by its results, becomes the standard of utility by which to adjust the value of an entire liberal profession in the estimation of the public upon which it depends for support, be permitted to remain unpopular in the schools, and uncultivated in the profession, it cannot be difficult to foresee the result.

As the regular profession gives up its reliance in, and its use of the materia medica, the quack and the patent medicine trader stand ready enough to take it up, and a good rational formula for a cathartic pill, such as that of the pharmacopœia—and a good formula for an expectorant mixture—a good formula for a vermifuge—and one for an alterative, have each in its turn made fortunes far larger than any physician can ever hope to attain, and a part of this unquestionably through absolute good results obtained. Indeed, almost all quack medicines are more or less skillful combinations of well known and long-used articles of the materia medica, and these are often selected with a skill and knowledge, and even with a disregard for cost, when it comes into antagonism with quality, which is more rare in the better cause of true medical science; and it is a humiliating statement, though positively true within my own knowledge, that from time to time, as those quack nostrums start upon their career, their proprietors become well known in the drug market as

free and often liberal buyers of the best articles of the officinal materia medica. *They* use the pharmacopœia, and its tests and requirements, and apply the sharpness of trade in quality as well as in price, at least until the reputation of their formula is sufficiently established to allow them to debase its quality with safety to their pecuniary interests. It not very frequently happens that these buyers exhaust the market of drugs of a particular quality, and the comparatively small demand of the legitimate profession has to be supplied by the lower grades.—*Medical and Surgical Journal.*

IV.—LIMOSIS AND PARAGEUSIS. By W. MARSDEN, M. D., Ex-President, and Governor Col. Physicians and Surgeons L. C.; Hon. Fel. Medico-Bot. S. Lond.; Cor. Fel. M. S. Lond.; Hon. Fel. Path. S. M.; Hon. Fel. Med. S. and Syc., Nat. Hist Bocks.; &c., &c.

Such cases as the following, are very interesting, and shows how much more important a part fluids play in the economy of nutrition, than solids. Here we have milk doing the work of nutrition as well as bread, beef and potatoes; and why not? Milk appears to partake of the nature of both animal and vegetable food. Milk contains casein, fat and sugar, and we have the casein or curd, and the fat or butter representing the fibrin and fat of beef, and at the same time a large proportion of sugar which is much increased by "molasses and sometimes a large lump of sugar," which represents the starch of wheaten bread.

The general pathologist is somewhat embarrassed to find a significant term or names for certain morbid conditions of the human economy, or perplexed to find a system of nosology to which to refer certain cases of diseased action; and such is my position in the present instance. In the case I am about to narrate, there is *morbid taste* as well as *morbid appetite*, which renders a classification more difficult or complex. It will at any rate I think, be conceded, that it is entitled to a place among the "*cas rares.*"

Many persons from birth, or some after period of life, are capable of taking an enormous quantity of food into the stomach, without any habit of indulgence, but who do not increase in bulk in proportion to the quantity taken; on the contrary, are often meagre and emaciated. Others from mere habit eat very much more than is necessary to carry on healthy vital action, and suffer correspond-

ingly. Others again live on an inconceivable small quantity of food, and enjoy perfect health. Others again live and thrive upon a solitary article of food constituting a monivorous class, if I may be permitted to originate a term; and others live entirely on fluids and continue healthy. I am acquinted with a strong, healthy, active and lusty farmer, who resides in the District of Three Rivers, that has lived for very many years entirely on milk, whose taste is perfect, and who enjoys his food exceedingly. I cannot at present, (but may hereafter), refer to some interesting cases of this latter kind, for which I have been consulted; but will now confine myself to a solitary case, for which I am indebted to A. A. Andrews, M. A., M. D., of Windsor, Canada West, which I transcribe literally. It was addressed to me, dated August 26th, 1866, and is as follows: "Engrossed as I know you are on the subject of cholera, I do not suppose that one disease wholly absorbs your study, but that matters of general interest in the profession obtain a share of your attention, and a very singular case having come under my notice yesterday, I have determined to transmit you an account of it.

I was requested to see and prescribe for a patient of my friend, Dr. Donelly. It was a well marked case of jaundice. The patient informed me that she had never eaten in her life. "Je n'ai jamais mangè de ma vie.". Taking this to be a mere *facon de parler*, and to signify merely that she had habitually a poor appetite, and for as long as she could remember had never made a hearty meal, I paid no particular regard to the statement, but closer investigation elucidated the following relation, which I have every reason to believe literally correct.

Clothilde Chauvin, æt. 25, married four years since to Joseph Mayeux; both parties born and residing at Pointe des Roches in this country. When she was about three months old, she had whooping cough very severely, and the vomiting that attended it was protracted, and brought her to death's door. On weaning, any attempt to give her solid food even in the most attenuated form, was invariably followed by immediate vomiting. Bread, crackers, flour or arrow root in the *smallest* quantity added to her milk, never failed to be at once rejected. Her death from inanition was expected from day to day and from week to week, but instead of dying, she throve wonderfully. It was then confidently predicted she could not survive her seventh year, but she passed that period without any sickness worth a moment's care. The age of puberty was then allotted as the utmost possible limits of her life, but she attained full womanhood without knowing what it was to be sick. Her (would be *savant*) friends now assigned her majority as the period of her assured death, but she preferred marriage, and at 21 was

married to the aforenamed Mayeux, and at 23 became a mother.—She is now far advanced in her second pregnancy—the first time that she remembers ever to have been sick. I asked her what her weight was, and she appealed to her husband, who said he believed it was one hundred and forty pounds. I am inclined from the size and solidity of her arm to believe he underrates it. Working in the harvest field she says, no girl ever went before her; playing on the hay mow, neither boy nor girl could handle her. 'What do you live on?' I asked. *A bowl of milk with two tablespoonsful of molasses three times a day and sometimes a lump of sugar which I suck.*' I observed to her, that if she had not tried to eat, she could not tell whether she could swallow or no. She said 'she had tried again and again, and that she *could swallow very well.*' 'Then it seems you do eat, only you reject what you have eaten.'—'Instantly,' was the reply. 'How long is it since you made the last attempt to eat?' 'Seven or eight years.' 'Have you eaten nothing since you were married?' "No not for many years before—no kind of solid food has gone inside my lips, nothing but milk, molasses and sugar' 'Fruit, raspberries or strawberries?" "I have put them on my tongue to see if I could taste them, but never attempted to swallow one, *but I have no taste, I can taste nothing.*' Whether this last statement is *absolutely* true I did not ascertain by special enquiries, but she led me to suppose that, salt, vinegar, or gall alike failed to produce any impression: in fact, that the gustatory nerves were paralyzed or wanting.

I would have pursued my inquiries, but she had 24 miles to ride, and I did not feel warranted in taking up more of her time.

The mere fact that existence has been maintained for 25 years on this diet is not so amazing, as the large amount of physical strength developed under it. Of the truth of the whole narration I have not the least doubt, and I think it a really surprising case. In appearance she resembles a stout well developed French "Habitan woman." The Doctor adds: "I begin her history, as she gave it to me, with the whooping cough, though, how far (if at all) that is connected with the case, I am not prepared to say."

I hope to be able to return to this subject again.—*Canada Med. Journal.*

V.—VESICO-VAGINAL FISTULA: THE PREPARATORY TREATMENT AND MODE OF OPERATION. By THOMAS ADDIS EMMET, M. D., Surgeon of the N. Y. State Woman's Hospital, New York.

Since the application of the metallic suture to the class of injuries under consideration, and its subsequent general use in obstet-

rical surgery, scarcely any other branch of our profession has made more progress, with a greater promise for the future.—Posterity, regardless of counter claims of priority, will ever intimately associate the name of J. Marion Sims with the use of the metallic suture. It is not my purpose, however, to review at length the labours of Dr. Sims, or the subsequent claims of others who have contributed at home and abroad to the common stock, for they are as "household words" to the operator. But as an explorer in a field almost uniformly unsuccessful, as a demonstrator of the two principles applicable, and as the originator of the necessary instruments which have not been improved, whereby success is now the rule, he can rest his claims with the future. Through his teaching, in a development of the surgical field peculiar to woman, the progressive results have been such as seldom follow the efforts of a single individual, and the subsequent success of others can but confirm his claims.

In this country there are now but few surgeons who have not been successful, for the operation is one of the most certain of success in surgery, provided that the edges of the fistula are properly denuded and secured without undue tension by the metallic suture. This fact is demonstrated by the records of the Woman's Hospital, as, for some years past, with the increased experience of the profession in the mode of operating, but few cases have been admitted to the institution in which the loss of tissue had been so slight that the edges could be approximated without the aid of plastic surgery. It is my purpose to present in detail, from over two hundred successful cases, a selection in illustration of many points of difficulty which would be rarely met with in private practice, but which are of frequent occurrence in so large a school. With the exception of a few cases operated on while I was the assistant surgeon, all have occurred during the past five years in my service as surgeon to the hospital, or in private practice.

As the result of an experience based on some two hundred and fifty cases in my own practice alone, I may state as a principle that scarcely any case is incurable. The operator, however, like an engineer, must fully appreciate the peculiarities of the situation, and make each point availiable in his defence; and his success will be in proportion to his ingenuity in turning to the best account the peculiar features of each case. Unfortunately, however, in many difficult cases, the patient is either in indigent circumstances or unable to spare the necessary time from her home duties, and, withal, during the many progressive operations so often requisite, the faith of the sufferer, as well as the patience of the operator must often be severely taxed. The soft parts are susceptible of

such great modification that it is often impossible for the surgeon to fully anticipate from the first what may be the result of his labours. It is only step by step, as the parts are relieved of tension, that they become moulded to their new condition. A full conception of what may be accomplished can only be formed with the gradual disappearance of the cicatricial tissue, and after a more healthy condition has been brought about by proper treatment. I have had but five cases which I have been obliged to abandon as wholly incurable, not so much in consequence of the actual extent of the injury sustained, as from the excessive obesity which rendered it impossible to bring the parts into view, and from the fact that, through great irritability of the nervous system, they were unable to bear a long operation on the knees, in the position necessary for their ease.—About fifty patients who have been under treatment in the hospital have returned home for various causes at different stages of their treatment. Many have done so after months of careful preparatory treatment, without waiting for a final operation, being satisfied with their improved condition. Others have done so with my advice, either to recuperate or to await the efforts of nature in bringing about some desirable change in the parts previous to another operation, and a small number for disorderly conduct. These cases are frequently relieved afterwards by an operation at home, and have been placed on record as cases which were discharged incurable from the Woman's Hospital, while the operator did not realize how much had been accomplished for him, and that in many cases the mere closing of the fistula was not difficult after the parts had already been properly prepared.

A vesico-vaginal fistula following parturition may be defined as an opening from sloughing in the bladder, resulting from delay in delivery after impaction has taken place. The exceptions to this rule are those caused by rapid labour, lacerating the neck of the uterus, and extending beyond so as to involve the base, together with lacerations at the neck of the bladder, which sometimes occur on delivery by forceps. The accepted teacher to wait any given length of time after the occurrence of impaction, with the hope that nature may yet accomplish the delivery unaided, is, as a rule, attended with great danger. After a careful review of all the recorded cases admitted to the Woman's Hospital since its foundation (some twelve years ago), I cannot satisfy myself that more than three cases out of the whole number should be regarded as having resulted from instrumental delivery. These were cases of malpractice, and of no value in a statistical point of view. An escape of urine frequently follows immediately after delivery by forceps, but only as a result of the slough, which had already taken

place, and at the time partially detached. In accepting the teaching based on so large a record, I believe that, after impaction has occurred, a novice would be likely to do less damage to the soft parts in applying the forceps or using the perforator, if familiar with the mechanism of labour, than in leaving the case to nature, as is frequently done. I have known the greater part of the base of the bladder lost by subsequent sloughing after an impaction of the head for only two hours. And, again, we have cases on record which had been left to nature undelivered from a week to ten days, and one over a week after the head had passed the vulva. It is evident, therefore, that the average duration of labour cannot be taken as a guide, for the injury had actually resulted long before delivery, although the slough may not have been separated for a week or two afterward, as is frequently the case. The only deduction that we can draw from experience is, that the lower the head is left in the pelvis the greater is the danger, and that less than two hours even is sufficient to cause extensive loss of tissue; also, that the amount of injury is by no means in proportion to the length of labour, and that the only safety consists in as rapid delivery as the circumstances of the case will admit.

After treating of the proper means of preparing the patient, the necessary instruments, and the method of operating which has proved most successfully in my hands, together with the after-treatment, I shall present a series of cases under the following classifications: 1st. Fistulæ from laceration of the cervix, with or without sloughing, and involving a portion of the base of the bladder; 2d. From the sloughing of some portions or loss of the whole base; 3. Lacerations across the neck of the bladder or urethra; 4th. Loss of the entire base of the bladder, the cervix uteri and the urethra.

Unless the greatest care has been given to cleanliness, the sufferer, in a few weeks after receiving the injury, becomes a most loathsome object. From the irritation of the urine, the external organs of generation become excoriated and œdematous, with the same condition extending over the buttocks and down the thighs. The labiæ are frequently the seat of deep ulcerations, and occasionally of abscesses. The mucous membrane of the vagina is in part lost, and the abraded surface rapidly becomes covered at every point with a sabulous offensive phosphatic deposit from the urine. If the loss of tissue has been extensive, the inverted posterior wall of the bladder protrudes in a semi-strangulated condition, more or less incrusted with the same deposit, and bleeding readily. The deposit will frequently accumulate to such an extent in the vagina that the sufferer becomes unable to walk or even to stand upright without the greatest agony.

This deposit must be carefully removed, so far as possible, by means of a soft sponge, and the raw surface brushed over with a weak solution of nitrate of silver. If, at any point, it cannot be at first removed without causing too much bleeding, the deposit itself must be treated in the same manner, or coated with the solid stick. Warm Sitz baths add greatly to the comfort of the sufferer. The vagina must be washed out several times a day with a large quantity of tepid water. After bathing, it is best for the patient to protect herself by freely anointing the outlet of the vagina, and the neighbouring parts with any simple ointment; the ceratum calaminæ, however, being the best. She must be instructed to wash her napkins thoroughly when saturated with urine, and not simply to dry them for after use. Time and the increased comfort of the patient are gained by judicious attention to such details. About every fifth day, the excoriated surfaces yet unhealed should be protected with the solution of nitrate of silver; and it is necessary frequently to pursue the same general course for many weeks, before the parts can be brought into a perfectly healthy condition. This point is not reached until not only the vaginal walls, but also the hypertrophied and indurated edges of the fistula have attained a natural colour and density. This is the secret success; but the necessity is rarely appreciated; without it, the most skilfully performed operation is almost certain to fail.

When the proper condition has been brought about, the surgeon may then be able to decide upon some definite plan of procedure for the closing of the fistula. The edges should be seized at opposite points with a tenaculum held in each hand, and the degree of tension judged by an approximation in different directions. If, at any point, the edges do not come readily together, the finger can detect the seat of resistance, while the parts are kept on the stretch by a tenaculum in the other hand. When the bands are comparatively slight, and superficial, or brought well up by traction, it is generally sufficient to divide them with scissors at the time of the operation for closure. But, on the contrary, when the tension is due to more extensive sloughing, or when the cul-de-sac has been destroyed, the parts can seldom be properly freed without more or less hæmorrhage as a complication, and it will be necessary to make one or more preparatory operation. Placing the patient on the back, with two fingers of the left hand introduced into the rectum as a guide, and the thumb into the vagina to make counter-pressure, freely snip with a pair of blunt-pointed scissors, point after point, as indicated by the pressure of the thumb. This can be done to any extent without the speculum, and without fear of entering either the rectum or the bladder, if the position of the uterus is

recognized, and a proper use is made of the fingers in the rectum as a guide. After opening up the vagina as freely as is deemed prudent at the time, a glass vaginal plug, only just long enough to put the canal well on the stretch, without fear of producing sloughing or pelvic inflammation by too great a length, should be introduced, and secured in place by a T bandage. The instrument has a sufficient rim to prevent it from slipping into the vagina, with a depression to receive the urethra along its course, and to protect it from pressure. This useful instrument was devised by Dr. Sims, and is fully described in his Clinical Notes on Obstetrical Surgery. The hæmorrhage is sometimes excessive, but is generally controlled as soon as the plug is introduced; and as the instrument is hollow, it possesses all the advantage of a speculum in exposing the condition beyond. If the blood, however, begins to escape along the sides of the plug, it can be controlled by introducing, with a pair of dressing-forceps, portions of damp cotton along the depression made for the urethra, while rotating the instrument until the outlet of the vagina has been encircled by a tampon and the starting-point regained. It is remarkable how much can be accomplished through the absorbents in a few weeks with judicious pressure exerted by this instrument on cicatricial tissue. Experience has fully demonstrated that the use of the scissors is preferable to that of the knife; with less risk of inflammation and certainly less hæmorrhage, cicatricial tissue lacerated or divided by scissors, as we shall show hereafter, does not heal so rapidly, and time is consequently gained to bring about this absorption.

The patient should be lifted into bed and kept there for a week or ten days. Opium should be administered freely, if needed. The urine can be drawn by a catheter, if necessary, without removing the instrument; for, if there has been much hæmorrhage, it is not well to remove the speculum until it has become somewhat loosened by the discharge. When it is deemed safe to remove the plug, then large warm water injections with a little castile soap should be continued daily, and oftener if the discharge is profuse. After the parts have been properly healed, if necessary, repeat the operation for enlarging the canal until the object in view has been attained.

Before operating for closing the fistula, the bowels should be thoroughly acted on by a cathartic. A table, some four feet long and three feet in height, covered with several fold of blankets, should be prepared for the operation. The patient should be dressed in a night-gown and drawers, with the abdomen free from any restraint about the waist. It is rarely that any other position is needed than on the left side, with the knees flexed on the abdo-

men, the body well rolled over on the chest, the left arm turned up over the back, and the head elevated little as possible. If covered with a sheet, and with drawers, the night-gown of the patient should be slipped up around the waist, so as to protect it from becoming soiled, all of which can be arranged before hand by a nurse or female attendant. The buttocks must be drawn down to the edge of the table, and a portion of the sheet on which the patient is lying thrown over her, the speculum introduced, and the edges of the sheet properly tucked in between the legs so as to prevent exposure. If Sims' speculum can be properly held by an assistant, it is the best instrument above all others for this operation. A very good substitute, however, is a self-retaining speculum which I have lately perfected so as to answer exceedingly well in a large majority of cases, if the cul-de-sac has not been lost. It withdraws the perineum and elevates the upper labium as is done with Sims' instrument; while for the treatment of uterine disease it now answers every purpose, and brings the cervex in view with the same facility. But I shall always employ his instrument to a great extent from having well-trained nurses accustomed to its use, as well as from its simplicity and the saving of time in adjusting it.

Having decided on the direction for closing the fistula, its edges must be scarified by seizing with a tenaculum the most depending point, and, with a pair of scissors of a proper curve, proceed to remove the inner edge in a continuous strip. It requires but little practice to make this in most cases continuous around the entire fistula to the starting-point; and, if the denuded portion is not of sufficient width, another strip can be removed just outside of it.—The scarification should be extended as near the mucous membrane of the bladder as possible, without actually involving it. A number of probang sponges are indispensable, and an active assistant will be able to keep the freshened edges so far free that, unless an unusual hæmorrhage takes place, the operator will not be inconvenienced by the bleeding, if scissors have been used for paring the edges. I have for several years confined myself to the use of scissors made with two different curves, and each duplicated in the reverse, so that they may be used with either hand. I may be deemed an enthusiast in my preference for the scissors to the exclusion of the knife. But, although alike practised in the use of both, I am satisfied that with the scissors I can complete the scarification in half the time, that no portion is left undenuded, and that there is less bleeding; for, since confining myself to their use, I have not had either to delay or to abandon an operation, a frequent occurrence formerly with the knife. Sims' tenaculum of the proper size is much smaller than the instrument generally used, and can scarcely be made too delicate if

well tempered. My friend, Dr. John G. Perry, Assistant Surgeon to the Woman's Hospital, has devised a barb-pointed tenaculum, which is a most useful instrument, as it prevents the tissue from slipping off when once fairly caught up. In the choice of needles, I prefer that they should be made small, short and round, with a slight curve near the point, thickest at the eye and countersunk to receive the thread. These have the advantage of making a punctured wound, which will be perfectly filled by the wire. The needle in general use, however, which is spear-pointed, or triangular in shape, with a cutting edge, and of many times the diameter of the wire, frequently causes a troublesome oozing of blood after the sutures are secured, and sometimes a small fistula will remain along its track, if, by chance, its course has been too near the bladder. The needle forceps first introduced by Dr. Sims, has not yet been improved upon for the facility with which the short needle can be introduced at any angle and in a confined space. The point of the tenaculum should be introduced toward the fistula, at a convenient distance from its vaginal edge; then, by a rotation of the hand in the opposite direction, the bladder edge of the fistula will be turned out. Introduce the needle behind the tenaculum, bringing out its point just at the bladder surface, and while still grasping it with the forceps, withdraw the tenaculum, pass its hook over the point of the needle to make counterpressure, while it is advanced as far as the forceps will allow, then seize the exposed portion of the needle, and draw it entirely through. On the opposite side, seize the edge of the fistula with the tenaculum, in the same manner, and introduce the needle at a corresponding point, near the bladder surface. As a rule, from four to five sutures should be introduced to the inch, and one or more passed at each extremity beyond the fistula, according to the shape of the angle, the necessity of which will be hereafter demonstrated. The needle should be armed with a short silk loop and tied with a half knot at the eye. As each suture is introduced, it is better to follow at once with the wire, for the silk soon becomes weakened after being saturated with the blood and urine. It is secured by hooking a small portion into the silk loop, making it flat at the angle, and giving it one or more turns so that it may not slip. Frequently the strain is too great on the tissues to pull the suture through at a sharp angle; then a shallow, forked instrument, devised by Dr. Sims, is necessary, so that by pushing one portion after another near the point of exit, by the instrument in one hand and the silk held in the other, it may cause the wire to follow in the line of introduction. As to the best method of securing the edges of the fistula, I have an unqualified preference to the simple interrupted suture. Dr. Sims, some nine

years ago, abandoned his clamp, having demonstrated that the interrupted suture fulfilled every indication, a fact which my experience since has fully confirmed. While Dr. Bozeman's button suture fulfils in his hands all that he claims for it, and gives an elegant finish to the operation, all do not possess his dexterity in its use. I have used it frequently, and with success, after understanding its application, but at the same time I could never satisfy myself that it simplified the operation, or that I could in any case gain a better result by its use than with the simple interrupted suture. When the fistula is a large one, and a number of sutures are required, to save time and some confusion afterward, shorten the suture by drawing it well through, make a small loop in the short end, and pass the long one through it, to be held by the assistant behind the speculum. Dr. Sims has always insisted on the importance of introducing the sutures with great care, so that the points of entrance and exit should be at the same distance from the edges of the fistula. The principle is correct, in order to avoid the approximation of the scarified surface with an opposite portion which has not been denuded, in which case, of course, no union would take place. But, in reality, to introduce the sutures with any such degree of accuracy is almost impossible, even with constant practice, and with the fistula in a favourable position. Within a reasonable limit this great accuracy is unnecessary, if the sutures are properly shouldered at the time of securing them, so that the point of twisting shall be immediately over the line of union. In other words, each end of the suture must be bent flat on itself to the vaginal surface at the point of exit, and at a right angle again just at the edge of the fistula. If this is done with care, and the suture is only twisted up to the angle formed at the edge of the fistula, it is evident that there can be no turning in of either border. It is generally most convenient to secure first the suture nearest the outlet of the vagina. By following up an end from the fistula with a blunt hook or tenaculum, it can be readily disengaged from the others held by the assistant. While the long end is held in the left hand, shorten the loop by traction to about three-quarters of an inch in length; seize the little slip-knot with the twisting forceps, so as to insure by so doing that both ends of the suture are included within its grasp, and cut off the excess of wire. Make sufficient traction to bring the edges of the fistula together, than shoulder properly with the blunt hook each strand, as already described. After introducing the loop within the slit of the shield, bring the forceps and the handle of the former together and twist until the angle formed by the crossing of the two strands of wire is lost just at the edge of the slit in the shield. The surface over which the

suture is to be twisted should be properly made with a very thin edge; therefore, when the wire is bent at a right angle over it, by moderate traction, as the two instruments are brought together and the twisting is not carried beyond a given point, it is evident that with ordinary care the edges of the fistula will be only just brought into apposition. The drawing up of the suture with too great traction, and continuing the twisting beyond the proper point so as to strangulate the parts included within the loop, can be the only cause for a metallic suture ever cutting out, if the parts have been properly freed from tension before the operation. As it is very necessary that the suture should lie flat on the vaginal surface, after it has been secured, withdraw the shield and, while still grasping the suture, pass a tenaculum benea h the twisted portion close to the line of the fistula, in order to lift it up; then bend the wire down by moderate traction over the hook used as a fulcrum; withdraw the tenaculum, and press the wire downward near the end in the grasp of the forceps, as the latter is made to bend the wire upward in the opposite direction; cut the wire just at the angle made by pressure of the tenaculum; it will be then found that by thus turning the suture over and making pressure in the middle, as the free end is bent upward in the opposite direction, the suture will lie perfectly flat. The angle where the suture is to be cut off should be made about half an inch from the edge of the closed fistula. When there is room to admit of doing so, it is well to turn every other suture to the opposite side as a guide afterward, when they are to be removed, should any of them become embedded in the tissues.

After completing the operation, turn the patient gently on the back, introduce a catheter, and, if the urine is discoloured, inject tepid water into the bladder for the purpose of washing out any blood which may have accumulated. To Sims' sigmoid, or self-retaining catheter, we are greatly indebted for success in this operation, as well as for much additional comfort to the patient. It should always be made of block tin, that the curve may be altered to fit each individual case, so as not to touch the fundus of the bladder, yet of sufficient length, on being nicely balanced in the urethra to lie close up behind the pubes. The patient must lie the greater part of the time on the back, and, if possible, preserve this position until after the sutures have been removed. It will add greatly to her comfort to have a double-inclined plane well padded to support the lower limbs when drawn up, which can be removed from time to time to stretch them at full length for a change of position. The support should be open at the ends with a portion of the side removed so as not to interfere with the catheter. We have

generally used as a receptacle for the urine a large sized oval bird-bath or cup, such as are placed in cages. The catheter must be removed several times a day for the purpose of cleaning it by forcing a stream of water through it by means of a large syringe, and the patient must be instructed to notice carefully that the urine has a free escape at all times. It is well to have two catheters, so that one may be introduced immediately on the removal of the other to be cleaned. A sufficient quantity of opium should be administered daily to keep the bowels constipated until the sutures are removed, and the diet regulated with a view to this end. The sutures are usually removed from the eighth to the tenth day, by gently elevating each in turn with the forceps, and clipping the nearest side of the loop so that, as the suture is being withdrawn, it still continues to bind the parts until its exit. Twelve hours afterwards, a dose of castor oil should be administered. The catheter should be continued in use for a few days longer, according to circumstances; and, from the fourteenth to the twentieth day, the patient may sit up.

I have now reviewed, but only in brief, the general management and mode of operating. To have entered more into detail would have been impossible, without repetition in anticipating many practical points to be hereafter illustrated by cases, which shall be carefully selected with this object in view.—*American Journal Medical Sciences.*

CLINICAL RECORDS.

"Ex Principiis, nascitur probabilitas: ex factis, vero veritas."

Operation for Partial Laceration of the Perineum—Vaginal Rectocele, with Hypertrophy of the Mucous Membrane, and this Prolapse so Decided as to give rise to Vaginal Cystocele.

Reported by Junius L. Powell, M. D., Recording Physician to University Hospital, Baltimore, Md.

Mrs. M. R., æt. 35, admitted into the Hospital July 30th; is the mother of eight children. The last confinement, twenty months ago, produced laceration of the perineum, the rupture extending almost into the rectum.

Dr. James H. Butler, Demonstrator of Anatomy and at the time Visiting Surgeon to the Hospital, first saw her on the 31st. Upon examination, he found, in addition to the above condition, the parts very much relaxed and distended, the os tincæ protruding through the outlet of the vagina, the posterior wall of the vagina and the rectum participating, constituting, according to the nomenclature of Malgaigne, vaginal rectocele. As the connection between the bladder and womb is always very firm, a similar state of things existed in front, giving rise, according to the same authority, to vaginal cystocele. She had already undergone two or three operations, the principal means adopted to bring the parts in adherence being the potassa fusa. All were without success. The next day he operated, having previously given direction for the bowels to be entirely cleared of their contents, in order that there might be no evacuation during the process of union. Under chloroform, the patient being placed in the lithotomy position, he pared away the surface on either side, making a V shaped incision of about one-half inch in thickness and three inches in length. The parts were brought into exact apposition by a double row of silver wire sutures, three deep and three superficial, the former being carried deeply down, so as to take in the entire raw surface, and clamped on either side with drilled shot, making a dumb-bell suture. The superficial were passed through and twisted in the ordinary way. For a brief period a catheter was allowed to remain in the urethra, in order to prevent the accumulation of urine in the sac which was formed below. The deep wires were removed on the fifth day, the superficial on the seventh. The constitutional symptoms have been unimportant.—Her bowels were moved for the first time on tenth day, an injection having been employed for that purpose.

At the present date of writing, August 13th, there is perfect union of the parts and the womb seems to have returned to its normal position. Patient has been nourished during her confinement to the bed with beef tea, chicken broth and milk, the bowels kept inactive by opiates and the parts syringed out when occasion required. About one week before the time for their appearance her menses began, which, however, lasted a very short time, and occasioned no change whatever in the conduct of the case.

August 15th.—Yesterday patient walked about the room for the first time. The parts exhibit no dispostion to prolapse again. She expresses herself as well pleased with the result, and says she is entirely free from the pain which has afflicted her for such a considerable period of time.

August 17th.—Patient discharged, entirely recovered.

Remarks.—An account of the above case, with its results, is presented, in order to show the advantage of the shot over the quill, or any other support, to the deep sutures, in cases of operation for rupture of the perineum, with or without relaxation of the parts.—Lane gives, in the *London Lancet* for February, 1866, the report of a case which he treated with perforated ivory bars, instead of the quills, and remarks upon their value. To those who are fond of investigating such matters, the superior merit of the shot must at once become obvious. His deep sutures are removed "at the end of 48 hours." He goes on to say, that "some œdematous swelling generally takes place, but soon subsides *after the pressure of the quill suture had been removed.* I have never seen any benefit from leaving the deep sutures longer than this; on the contrary, whenever I have done so, I have found that a good deal of additional irritation, and often suppuration, has been set up without any corresponding advantage." Would not Mr. Lane leave his deep sutures longer than forty-eight hours, if he were sure there would be no sloughing as the result of the continued pressure of the clamps or quills? We think so. In the case reported as having been operated upon by Dr. Butler, a much smaller surface having been subjected to pressure by the shot, there was much less danger of a slough, as evidenced by the greater length of time they were allowed to remain, without adding in any degree to the amount of irritation and œdema, beyond what ensued as a natural result of the use of the knife. Besides, having the circulation of a greater number of vessels unimpaired, necessarily insured greater vitality to the parts, and thereby rendered the probability of union more certain. The greater facility and ease with which the "dumb-bell" sutures are adjusted, add another recommendation to those already mentioned.

CLINICAL CASES. By R. L. MADISON, M. D., Professor of Physiology, Virginia Military Institute, Lexington.

Case I. Amaurosis of eighteen months duration—complete recovery:—On the 16th of April, 1864, was requested by Col. A. W. C., of Rockbridge County, Va., to visit his servant Morris, then 43 years of age, and suffering from total loss of vision. He further stated that as Morris had been an excellent servant he naturally felt anxious for some effort to be made for his restoration to sight. A most unfavourable prognosis was at once pronounced, and on visiting Morris the next day, found the worse apprehensions realized. He could not discern the brightest light, and suffered severely with cerebral and facial neuralgia and giddiness. Loss of sight had come on gradually, commencing two years before, accompanied by evidences of congestion of the optic lobes, and other signs of irregular circulation at the base of the brain; and for the last 18 months blindness had been complete.

Considering the case almost hopeless, it was, nevertheless, determined to try the effect of persistent counter-irritation, active purgation, and alterative treatment.

He was therefore directed to apply blisters to each mastoid region, to be dressed with savine and mercurial ointment—to take a brisk cathartic of calomel and colocynth every second night; and three times daily to take eight grains of the iodide of potassium with one twelfth of a grain of bichloride of mercury. Belladonna ointment was kept constantly applied over each supra-orbital region, being the only means obtainable at the time, for relieving the neuralgic pains. This treatment was faithfully carried out by Col. C., aided by the hearty coöperation of Morris, whose anxiety, of course, even exceeded that of his kind master.

May 7th.—Second visit—although scarcely three weeks had elapsed, yet Morris could not only distinguish day from night, but could even recognise my features; yet he still complained of the neuralgia and photophobia.

Continued the same treatment omitting the cathartic, for two weeks longer when the patient's vision and general health were entirely restored. He then resumed his duty as foreman on the farm and led the reapers in the ensuing harvest. Up to the present time his sight has continued excellent.

Remarks.—This case, so promptly relieved, presents nothing novel, either in its supposed pathology, or in the line of treatment adopted.

I inferred that either congestion at the base of the brain, or the products of chronic inflammation were creating pressure upon the tubercula quadrigemina, and that the indications were, by a revellent plan, to equalize the cerebral circulation, and at the same time to stimulate absorption of the products of inflammation should these exist.—Whether this conjectural pathology was right I do not presume to decide, but certainly the success, following the exhibition of remedies, seems to present it in the light of rational induction.

I have long entertained the opinion that the want of success attending the treatment of amaurosis (so-called) was not so much due to the obscurity of diagnosis, or to the difficulty of exciting absorption within the cranium, as to the fact, that the ganglia of special sense, like the centres of motion and general sensibility, will, after a time, lose their special powers simply from disuse—*functional* activity being quite as essential to perfect performance, as *structural* integrity. Thus it happens that congestion or inflammation by occasioning pressure upon the optic lobes will inevitably lead to temporary loss of sight, and this loss, in time, will become irremediable from organic changes in the visual apparatus, these changes, for the most part, being the result of arrested functional exercise. This is a matter of every day observation in regard to joints, muscles, &c.; these last often losing all trace of muscularity, and degenerating into areolar tissue from mere suspension of normal exercise. The same law probably holds true in regard to nerve structure, and, if so, indicates the extreme importance of early treatment in cases of paralysis of special sense; and demonstrates the difficulty or even hopelessness of attempting curative measures after the lapse of several years.

It is not for a moment to be supposed that the special treatment, adopted in this case, is considered of general applicability. Of course each amaurotic case presents features peculiar to itself, which necessarily modify both the indications and the methods of meeting them; for where the paralysis of vision is *un*attended with cerebral disorder neuralgia, or evidences of inflammation, the indications would rather point to the use of tonics, tetanics, stimulants and electricity, than to the employment of revellents and alteratives.

Note.—In the management of the above case, I had no ophthalmoscope with which to examine the deep structures of the eye.

Case II.—Resection of the Shoulder following gun-shot wound—speedy recovery.

March 7th, 1865.—Was requested by Drs. Leitch and Mackey to visit

a servant of Mr. John M. Patterson six miles west of Lexington, Va. On arrival received the following unique history of the case. The servant, whose name was "Davy," had undertaken, one week before, to *fight a duel* with a neighboring fellow-servant. In this "affaire d'honneur" the weapons used were shot guns, loaded with ball and buckshot. Distance unimportant. No seconds. Both parties were wounded in the rencontre, Davy being shot through the left arm close up to the shoulder, while his antagonist was wounded in his hip and hand, but not seriously. An examination of Davy's injury revealed two wounds, one in front of the joint, the orifice of entrance, the other on the opposite side, large, ragged and discharging offensive pus freely; the whole region of the joint being swollen, hot and very painful.—Erysipelas impending; tongue furred; bowels constipated; much thirst; pulse rapid and irritable; restlessness. Up to this time there had been no examination made of the wound, and no treatment employed except the water dressing. The index finger passed into the wound detected a comminuted fracture of the surgical neck. Found the humeral artery and brachial nerves uninjured, and determined to raise a flap of the deltoid in order to examine into the condition of the joint more thoroughly, and to decide whether to amputate or resect.—Passed a small catlin through the tracts of the wound and cut downwards and outwards. On turning back this flap found the neck of humerus shattered, and the epiphysis separated from the shaft. Removed the fragments, and the head of the bone, and sawed off the upper end of the humerus about one and a half inches below the anatomical neck, cleansed the wound thoroughly, secured a few arteries, attached the flap with three sutures, bound the limb to the chest by sustaining bandages and applied tepid water dressing.

Directed tincture of iron in large doses, stimulants freely, and nutritious diet. Chloroform was used in the operation not occupying more than ten minutes. Drs. Leitch and James rendered valuable assistance and the case now left in charge of the former, who subsecuently informed me that the wound healed satisfactorily in about two weeks. During the following June, some three and a half months afterwards, I was accosted by a negro on the Main Street of Lexington. On stating that I had not the honour of his acquaintance, he introduced himself as the quondam duellist of Buffalo creek, the resection of whose shoulder has just been described. He exhibited his arm and went through the evolutions with great satisfaction. He then enquired whether it would injure him to cut wheat? I replied, "Yes; it would be too severe a tax upon your strength." He answered, "'Ise been cuttin wheat for two weeks, but

thought I would ax you 'bout it!" I told him if that were the case he could go on and cut throughout the harvest, as I did not think any thing would hurt *him*. Davy is very proud of his arm, which he alleges has been "tuck off and sot back."

This case is reported partly as an instance of rapid and complete recovery, with a useful limb, after resection, and partly to show that the laws of honour are still respected in Virginia even by the F. B's.

ORIGINAL CORRESPONDENCE.

"Sit mihi Fas scribere audita."

DUBLIN, 1867.

Some months before any case of cholera occurred in Dublin, the attention of the Profession was called by Dr. R. Lyons, Dr. T. More Madden, and other writers in the Medical Journals, to certain peculiarities in the type and character of the prevailing diseases, which one of these gentlemen regarded as "premonitory signs of the epidemic tendency of the season." These so-called "premonitory signs" consisted chiefly in the prevalence of a peculiarly low, and rapidly fatal type of fever; while at the same time an outbreak of puerperal fever led to the temporary closing of the Rotunda Lying-in Hospital. Diphtheria was also a more general and more fatal disease than it had ever been in Dublin. Moreover, epigastric diseases occasioned great loss of cattle throughout the country.—This last circumstance led to the publication of a series of papers on the subject in the "Medical Press and Circular," by Dr. T. More Madden, who sought to prove, from the history of all the epidemics recorded in the ancient Irish annals, that in Ireland there has always been observed a very close and remarkable connection between epizootic and epidemic diseases, and that the former almost invariably precede or accompany the latter.

The history of the epidemic of 1866 appears to bear out Dr. More Madden's theory, for three months after the outbreak of contagious cattle disease in the North of Ireland the first case of cholera oc-

curred in Dublin on the 27th of July. The patient, who had just landed from Philadelphia, where cholera was then epidemic, died. The person attacked was the servant girl who waited on the first patient. From this house, on the City Quay, the disease crossed the Liffey and appeared in a distant part of the town. From the inquiries I instituted at the time, there appears to have been no communication whatever between the inhabitants of the two houses first infected.

The epidemic now spread rapidly through the City. The largest weekly number of deaths from cholera was in the week ending October 20th and 29th, in each of which 118 deaths from that cause were reported, and the smallest number of deaths from cholera since the commencement of the epidemic, was in the week ending January 5th, 1867, in which only two cholera deaths were registered. This is the third visit of cholera to Dublin, and each time it has recurred at exact periods of seventeen years, viz., in 1832, when there were 5,632 deaths from cholera; in 1849, when there were 3,853 deaths of cholera patients, and for the third time in 1866.

The treatment adopted during the epidemic in Dublin presents hardly any novel feature. Dr. Mapother and Dr. Rass recommended the "Eliminative treatment," by castor oil and turpentine. Dr. Barter insists on the efficacy of cold water; and one gentleman of my acquaintance treated some patients with what I consider very "heroic," to say the least of it, doses of strychnine, till the fatal termination of all the cases so treated convinced him of the worse than uselessness of that drug in cases of cholera. The great majority of the Dublin practitioners during the late epidemic, however, depended—and I believe acted wisely in so doing—mainly on astringents, especially opiates, in the early stages of cholera, and on the moderate use of stimulants, together with the repeated application of large mustard sinapisms over the abdomen, in the progress of the malady. My experience of this old-fashioned and simple plan, would lead me to prefer it to any of the more specious, theoretical systems of treating cholera lately suggested.

Remarkable case of Hepatic Abscess.

I had recently an opportunity of seeing a very remarkable case

of abscess of the liver under the care of Dr. Lyons in the Whitworth Hospital. The patient was admitted so far back as the 14th of August, complaining of dyspepsia and vomiting a couple of hours after taking food. He had pain in the back and also over the stomach and right hypochondriac region; there was some fullness the in scrobiculus cordis with tenderness on pressure. This swelling gradually became more marked and he complained of a stabbing pain, together with a feeling of pulsation in the tumour. His pulse was peculiarly slow, generally under 60, and on one occasion it fell to 38. These symptoms continued to increase for upwards of two months, notwithstanding the treatment resorted to.—Believing it to be a case of deep seated abscess of the left lobe of the liver, Dr. Lyons, after consultation, now resolved on puncturing that organ, and on the 2nd of November, having carefully dissected the superficial parts with a scalpel, he passed a fine trocar into the most prominent part of the tumour, but did not reach the abscess.—The instrument was therefore withdrawn and the patient left by those who witnessed the operation without any expectation of recovery. Strange to say, however, when he was visited that evening he appeared better than he had previously been; his pulse had fallen from 72 to 52 and he felt comfortable. A few days after the operation profuse sweats set in, the hepatic tumour slowly subsided, and a fortnight later he was able to sit up. Three weeks from the operation he left the hospital convalescent, and when seen last on the 19th of December, he appeared perfectly free from any trace of his late illness.

Treatment of Typhus Fever by Tea.

Dr. Grimshaw still continues the use of infusion of tea in the treatment of typhus, which he has lately introduced into practice; and relies in great measure on this remedy alone, in the majority of the cases under his care in Cork Street Hospital. The result of the experiment has been so far successful, only one death occurring in thirty-three cases in which tea was the principal remedy depended on. In some cases, however, Dr. Grimshaw gives wine and other therapeutic agents.

Lunacy in Ireland.

The recently issued "Report of the Inspectors of Lunatics in Ireland," shows an increase in the number of the insane. In the previous year there were only 8,272 lunatics in Ireland, while in the last year they report 8,845 cases of persons of unsound mind. Of these 4,835 were in public Asylums, 2,833 in poor-houses, 583 in private asylums, and the remainder in jails and criminal asylums. During the year 596 were discharged cured and 123 improved. The number returned as incurable, is 3,623. The average mortality, is only 8 per cent. There were only 1,175 idiots; and I may remark, what may not be generally known, that in no country in Europe is congenital idiotcy so rare as in Ireland. The non-restraint system has been adopted in the Irish lunatic asylums, and 2,632 patients are engaged in various employments, they cultivate 242 acres of tillage and the profit in their labour amounted in the year to £2,400.

The Cholera in the Patrick Dun's Hospital.

At a meeting of the Governers of this Institution, on the 8th of January, a report on the cases of cholera treated in the Hospital was received, by which it appears that from the 2d August, 1866, to January 8th, 1867, the number of cholera patients admitted was 181. Of these, 95 were discharged cured, and 85 died, the coëfficient of mortality thus being 47.22 per cent.

State of the Profession in Dublin.

In proportion to the population, there are more medical practitioners in Dublin than in any City in Europe. The foreigner, recently arrived, must wonder, as he walks through our leading streets and squares, and sees on almost every alternate door a refulgent brass-plate, announcing that "Dr. A," or "Mr. B, Surgeon," dwells therein. Where on earth can all these sons of Æsculapius find patients in a City like Dublin, which, ever since the Union, has been almost completely deserted by the aristocracy and gentry of the country? Still, a man like Sir Dominic Corrigan can yet make from five to six thousand a year by the Profession, and half a dozen others may receive from one to two thousand a year; but the

majority of medical men in Dublin could not live by their fees alone, and depend in great measure on the income they receive from their connexion with some of the six Dublin Schools of Physic. I need hardly add, that professional advancement is very slow work in Dublin. Thus, for instance, the late Dr. John Cheyne, who for many years held the foremost position in the Profession, tells us that during the first three years after he commenced to practice here, he only received three guineas, though he was then thirty-four years of age. Nine years later, however, he was making £5,000 a year by his fees.

The Dublin Hospitals—Recent Changes.

In our hospital appointments I have some, though not many, changes to record, for in Dublin medical situations are, "like angels visits, few and far between." The office of Assistant Surgeon to Steevens' Hospital, vacant by the untimely death of Dr. G. R. Symes, which was contested by Mr. Butcher, the President of the College of Surgeons, and Dr. Robert McDonnell, was obtained by the latter. In Mercer's Hospital Mr. E. S. O'Grady has succeeded Mr. Bevan, and the resignation of the retiring Surgeon is said to have cost his successor a thousand pounds. In Jarvis Street Hospital, as yet, no change has taken place, consequent on the preferment of Dr. R. McDonnell, and the reason assigned is, that no candidate has been found to purchase the vacancy for £500. Still a Hospital appointment is essential to a practitioner here, and some one will probably be found willing to act on the maxim laid down by Terence—"Pecuniam in loco negligere maximum est lucrum."

The College of Surgeons.

I have reason to believe that Dr. Arthur Jacob, the eminent oculist, whose name is so well known in connection with the "Membrana Jacobi" discovered and described by him in his researches into ophthalmic anatomy and surgery, is about to resign the chair of Physiology which he has filled in the College of Surgeons. There will probably be a very close contest for this appointment, which is worth near five hundred a year, between Dr. Mapother, Professor of Hygiene, and Dr. Morgan.

Trinity College Dublin.

The Chair of Botany in the University of Dublin, so long vacant by the death of the late Dr. W. H. Harvey, has just been filled by the appointment of Dr. Alexander Dixon, Jr. of Edinburgh and some dissatisfaction has been expressed that *Alma Mater* has ignored the claims of several distinguished Botanists educated within her own halls, and chosen her Professor of Botany in Edinburgh.

The Queen's University.

By the decision recently pronounced by the Master of the Rolls, the action of the Senate of the Queen's University in accepting a supplemental charter against the vote of the Convocation of the University has been set aside for the present. This is a matter of deep interest to the younger members of the Profession in this country, who until now have been excluded from the degree of M. D., unless they graduate in the University of Dublin, or else in one of the Queen's Colleges. Many students, however, are excluded by conscientious motives from these institutions and consequently a majority of the medical practitioners in Ireland have not taken a degree in Medicine, but practice on the license of the College of Physicians or Surgeons. The supplemental charter would have remedied this by allowing all students to present themselves for examination and if found qualified, to obtain the degree of M. D. from the Queen's University.

PARIS, July 31st 1867.

In a paper addressed to the Academy of Paris by Dr. Rosenthal of Ulm, a very important and perhaps a useful circumstance is brought to light.

Dr. Rosenthal having effected some experiments on a poison brought over from Malacca, and exercising an elective action on the heart, discovered that it acts with less intensity on fowls.

As the poison contains a large proportion of strychnine, he resumed his experiments with that poison in a *pure state*; its char-

acteristic property, as you are well aware, being that of producing tetanus.

Our author thus succeeded in determining the quantities of strychnine requisite to produce death in different animals. The doses do not differ considerably, though they are not absolutely the same. The ingestion of the poison was always effected by the mouth, and in the shape of a watery solution.

Rabbits require a milligm. of nitrate of strychnine for every 500 gms. of their weight; guinea-pigs, sparrows, and pigeons will absorb double that quantity before they die; chickens, on the contrary, will bear nicely twelve times that proportion. On this occasion, Dr. Rosenthal observed that by establishin ; artificial breathing in rabbits, so as to suppress all natural motion of respiration, they might be made to bear much larger doses of the poison than in the normal state. Under such artificial action the animal will walk on the table as if it had taken no poison; but no sooner is artificial respiration suspended than convulsions will begin again very rapidly and worse than ever. If artificial breathing be again applied, the fits will cease, and the animal return to its normal state. Hence it appears that a poison may be dormant in the blood of an animal, without producing its effect. And yet the poison has not lost its power, since it can resume it as soon as the artificial action is suspended. This shows that an abundance of oxygen in the blood will paralyze the effects of the poison, which thereby may be so completely neutralised as to save the animal's life.

This may be done by continuing artificial respiration for three or four hours, during which time the poision is eliminated, or more probably decomposed and converted into an innocuous substance.

These experiments may be found to be of use in cases of traumatic lockjaw; and it is not unreasonable to predict that patients of that class, whose life is now despaired of, may be saved by introducing oxygen into their organism by means of artificial respiration.

I have not yet had time to visit the Exhibition, where several medals, I have heard, have been awarded to Americans for superiority in manufacturing mineral teeth.

John D'Oyley Evans, D. D. S.

Journal of Dental Science.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

"Judex Damnatur cum nocens Absolvitur."

"Is It I?" A Book for every Man; a Companion to "Why Not?" a Book for every Woman. By Prof. Horatio Storer, M. D., of Boston, Vice President of the American Medical Association. Boston. Lee & Shepard. 1867. From the Publishers.

This Work may be regarded, in a certain sense, as a supplement to "Why Not," a Prize Essay, published during the past year.—Though addressed to a different sex, the object is essentially the same, the attainment of virtue and the suppression of crime. Dr. Storer having had a large experience in his specialty, as a gynecologist, has had ample material from which to select and from which to deduce those moral considerations that he has fully and agreeably presented. His "Why Not" has been a success and has aroused the missionary zeal of the Pulpit, the Secular and the Medical Press.

The crime of forced abortion or pre-natal infanticide is one which has disgraced this country, and more particularly those social circles whose refinement and education, would have naturally induced all persons to anticipate a different result. If "Why Not" has diminished this terrible crime and increased a natural abhorrence of those who are its willing subjects, or those who are the abettors of it, all will ascribe to its author the praise attaching to commendable efforts for suppressing one of the great evils and errors which is as discreditable as dangerous to man, either in his married or unmarried relations. This Work is divided into the following chapters: 1st. It is not good to be alone; 2d. Marriage as a sanitary measure; 3d. How early in life is marriage to be advised; 4th. The rights of the husband; 5th. Are these rights absolute or reciprocal with duties; 6th. Should mere instinct or reason be the rule; 7th. Arguments and counter arguments as to divorce; 8th. A plea for women. These subjects, difficult and delicate in their discussion, are presented without improper allusions, and the author uses both force and fairness

in his analysis of them. The work must do much good, and it is recommended, not only to the Profession, but to the general Public. Dr. Storer has been the successful pioneer in presenting professional subjects to unprofessional persons, and has demonstrated, that the etiquette governing Physicians in this connection is not based on principles which do not admit of exceptions useful and beneficial.

FRACTURES OF THE LOWER EXTREMITY, TREATED BY THE USE OF THE SUSPENSORY APPARATUS. By N. B. SMITH, M. D., Prof. of Surgery in the University of Maryland, Baltimore. Kelly & Piet. 1867.

This work is an enlargement and improvement of an article which originally appeared, from the pen of the distinguished author, in the American Journal of the Medical Sciences in April 1861.—Nothing more can be desired by those who are familiar with this apparatus, than the additional explanations and testimony furnished in the present work. During the recent war, this apparatus was familiar to every Confederate Surgeon and if there were nothing more known in regard to it, such knowledge would give it a position inferior to none among the mechanical resources of Surgery. It is, however, a deserved favourite with all Surgeons, military or civil, and the work is commended with confidence to the Professional Public. The execution of the volume in regard to typography and binding is most creditable to the publishers.

MISCELLANEOUS.

"Non Omnes Eadem mirantur Ament que."—HOR.

REMARKABLE MAL-FORMATION. By W. S. CARTER, M. D., Pittsboro, Ind.—Mrs. W. was delivered, after an easy labour at full term, of a living male child. The infant was perfectly quiet for a few minutes after its birth, and then spasmodic respiratory efforts were made. Thinking the throat might be obstructed by

mucus, I endeavoured to introduce my finger to remove it. The finger passed readily between the lips, but to my astonishment I could get it no farther than the gums, which both by sight and touch I found firmly united.

As it was necessary to act promptly, I immediately, with the assistance of my partner, Dr. Tilford, divided the tissue uniting the gums. This appeared to be about as thick as the gums and cartilaginous, extending as far back on either side as the angle of the jaw. Notwithstanding this free division, which enabled the child to breathe with more facility, the jaws were immovable.

After letting the patient rest a few hours, Dr. Sellers, of Brownsburg, visited the patient with me; and it was decided to use some force to separate the jaws, and make a further careful exploration. This exploration showed us a tough membrane, one-eighth of an inch in thickness, passing from the palate bone above, and inserted into, the lower gum. Upon the division of this, and the use of some little force, the jaws were separated.

In two weeks the gums had healed, the child took nourishment readily, and was doing well.

Other mal-formations also existed in this case, viz: the fingers and toes were webbed, and the ears were in rather a rudimentary condition—the integument passing from the head over the anterior surface of the upper third of each of these.

When the mother was about three months pregnant, her son, about six years of age, had a severe convulsion, the jaws being spasmodically closed. She was alone at the time, and her terror was excessive; and, indeed, since then, during all the remaining months of her pregnancy, she states the frightful scene has scarcely ever been absent from her mind.

Remarks.—We have delayed for some weeks the publication of Dr. Carter's extraordinary case, in order that we might, if possible, find recorded some similiar cases or case; but after a diligent search we have been utterly disappointed. Even Saint-Hilaire, to whose study of the various anomalies of organization science is so greatly indebted, fails us in presenting any analogous instance.

While almost any one of the external openings of the body may be imperforate, yet this condition much oftener affects the inferior than the superior orifices of the trunk—e. g., closure of the anus as a congenital condition is more frequently met with than closure of the eyelids, closure of the vagina than of the external auditory meatus.

In regard to congenital adhesions of the mouth hitherto described, they have been from adherence, sometimes complete, in other instances partial of the lips. Even this mal-formation the illustrious

Boyer spoke of as a possibility, never having seen it; but Velpeau discovered that Haller had pointed out its occurrence in the human species and also in the inferior animals, that Schenkius had met with cases upon which he had to operate, and that Desgenettes had seen a seven-months' fœtus with imperforate mouth.

In Saint-Hilaire's work, chapter iii, *Des Anomalies par continuite des parties ordinairement disjointes; Des Anomalies par Imperforation*, will be found the following, which may be of some interest in connection with Dr. Carter's report:—The imperforation of the nares is much less frequent than that of the eyelids; nevertheless Littré and Jean Bianchi have seen it in subjects in whom other irregularities also were found, and Oberteuffer has also several times observed the same condition.

In the case mentioned by Littré, the closure of the nares was complicated with closure of the mouth, the skin passing over both apertures, an anomaly of still less frequent occurrence. The closure of the mouth has also been seen when the nares were unobstructed, but these cases presented various other deviations also.

As to the possible influence of the sudden and severe terror to which the mother was subjected, which Dr. Carter mentions, in causing the mal-formation, it probably is better neither to affirm nor, still less, to deny. Certain it is that the tendency of the observant and thoughtful in our profession is, not to reject as "old wives' fables" all that is told us of the very strong influence of maternal impressions upon the fœtus, fables which have so long found such general credence with mothers and with the public. Those who are interested in the study of this question will find an admirable and philosophic discussion of it, by Dr. Alfred Meadows, in the seventh volume of the *London Obstetrical Society's Transactions*. It occurs in connectton with the report of a case of *Monstrosity*, given by Dr. M., the mother attributing the deformities of her offspring to the fact, that during the earlier weeks of her pregnancy she was greatly horrified by being shown some of Aristotle's plates, in which were exhibited some deformities resembling this, and specimens of other monstrosities.—*Western Journal of Medicine.*

The Disease of Job.—We are apt to smile sometimes at the enthusiasm, energy, and industry antiquarians will throw into their investigations upon what may seem to the outside world matters of little importance; and it would seem that the Medicos are not devoid of this spirit on suitable occasions, for the Société Impériale de Médicine de Lyon has devoted its recent meetings to the discussion of the nature of the affection from which Job was a sufferer. M. Rollet entered into an elaborate historical investigation upon the

subject, and, after rejecting the various other maladies which have been suggested, came to the conclusion that scorbutus was really the one in question. Weighed down by moral causes and depressing influences the patriarch, the subject first of a general neuropathy, exhibited various cachetic symptoms, chief of which were severe stomatitis, accompanied by fœtid breath, difficulty of eating, emaciation, abdominal pains, and diarrhœa. The blackish colour of the skin, petechial eruptions, purpura, and sanguineous suffusions are all pathognomic of scorbutus. M. Aubert Roche and other observers have shown that scorbutus accompanied by ulcerations, is of frequent occurrence on the borders of the Red Sea.—*Medical Times and Gazette.*

Sloughing produced by Local Anæsthesia.—We examined, a few days since, in the Middlesex Hospital, a young woman whose case is of no little importance in reference to the question of local against general anæsthesia for operations. Mr. Lawson had diagnosed the existence of an abscess behind the patient's breast, and as the pus was very deep (under the pectoral muscle indeed) the refrigerator was used, paraffine ether being employed. Congelation was readily produced, and kept up for a few minutes. The result has been, that a portion of skin, about an inch by three-quarters of an inch, over the upper part of the breast, had sloughed, and its healing will necessarily be attended by an unseemly scar. The patient is a maidservant; were she unfortunately a lady, the undress of the modern ball-room would be impracticable without revealing such a blemish as might seriously damage her value in the matrimonial market. The case is certainly exceptional; but the circumstance is worth remembering when exposed parts of the body are to be operated upon.—*Lancet.*

Reduction of Hernia by the Administration of Coffee.—That coffee has a very much more powerful influence on the peristaltic movements of the intestine than tea is pretty generally known; but we doubt whether this action has hitherto been brought into play in the reduction of hernia. The following instance in which coffee was accidentally and successfully employed for the purpose will therefore interest our readers: A man who had for some years a reducible hernia, while over-exerting himself converted his hernia into an irreducible one. On being seen by Dr. A. Bourillon, who describes the case, he was suffering from colic and nausea, the pulse was small, and a round, hard tumour, giving a tympanitic sound on percussion, existed in the right groin. The relations of this showed that it was a strangulated right inguinal

hernia. The taxis was tried in vain for hours. Applications of belladonna, tobacco, salt, &c., were also unsuccessfully tried. The next day the condition of things was worse, and all efforts to reduce the hernia were fruitless. It was therefore determined to operate on the following day, and the patient was meanwhile ordered to have infusion of coffee (100 grammes of freshly roasted and ground coffee to five cups of boiling water). On coming to operate in the morning, Dr. Bourillon found that the hernea was reduced. According to the patient's own account, the coffee having produced movement of the intestine, seemed to extend the contraction to the hernial sac, which passed inwards suddenly with a distinct *gargouillement.*—*Lancet.*

Ether Spray in Strangulated Hernia.—Dr. John Barclay reports, in the British Medical Journal, a case of strangulated hernia, in which reduction was accomplished after the use of ether spray. The pain induced by the most gentle handling of the hernial tumour was so intense that Dr. B. had to desist from taxis. Having brought with him Richardson's ether spray apparatus—thinking it might be useful in lieu of ice—it was determined to invert the patient, apply the ether spray short of freezing the skin, then to attempt the reduction, and, if failure was the result, to operate by the knife.

The head and shoulders then being supported on the floor by some pillows, and the buttocks raised as much as possible against an inclined plane, extemporized by an inverted bedroom chair, the ether spray was directed in the usual way on the swelling, for about forty seconds, when a minute spot of skin appeared white. The spray was at once removed, and on applying the fingers of the left hand on the swelling for about two seconds, accompanied by the most trifling pressure, plump up (or rather down) went the hernia, to the great delight and satisfaction of all. The man made a first rate recovery.—*Med. and Surg. Reporter.*

Cephalic Version.—We find the following statistics on cephalic version, an operation rarely done in this country, in the *Cincinnati Journal of Medicine*, in an article by Dr. M. B. Wright:—

The *Gazette Mèdicale de Paris*, of February, makes the following synopsis from the *Wurzburger Medicinische Zeitschrift* (edited by Bamberger and Scanzoni). The article is from the pen of O. V. Franque. We translate from the *Gazette Mèdicale*:—

"Cephalic version is less dangerous, both for the mother and the child. In the Duchy of Nassau, during a period of seventeen years (1843 to 1859), of 247,570 births, cephalic version was per-

formed 34 times for trunk presentations: of these 34 cases, 27 children were born alive; and in no instance did any accident occur to the mother. Podalic version was performed in 1852 cases, during the same period, and only 795 children were saved. And of the mothers, 106 died. The superiority, therefore, of cephalic version is beyond dispute; the mortality, as regards the child, by the latter method, being but twenty per cent., whereas, by podalic version, it was fifty-seven per cent. As regards the mother, the difference in its favour is still more striking. According to the author, too much restriction has been placed upon cephalic version—too many conditions prescribed (such as mobility of the child in the urine cavity, the head being near the superior strait, the regularity of the labour, an ample pelvis, no prolapsus of the cord, or protrusion of any portion of the fœtus.) O. V. Franque insists that the only contra-indications to the performance of cephalic version are: 1st, an abnormal form of the uterus, which may be ascertained; 2d, the death of the fœtus; 3d, whenever, from any cause, it may be necessary, for the safety of the child, to expedite the labour."

The above article, on cephalic version, will be highly gratifying to the advocates of that method of aiding labour and saving life. In Germany, it has long been practiced.—*Boston Medical and Surgical Journal.*

Animal Poison.—In some experiments on the poison of the cobra di capella, which George B. Halford, M. D., Professor of Anatomy in the University of Melbourne, has been lately engaged in, he has discovered that when a person is mortally bitten by the cobra, molecules of living "germinal" matter are thrown into the blood and speedily grow into cells. These cells multiply so rapidly that in a few hours millions upon millions are produced at the expense of the oxygen absorbed into the blood during respiration; and hence the gradual decrease and ultimate extinction of combustion and chemical change in every other part of the body, followed by coldness, sleepiness, insensibility, slow breathing, and death. The cells which thus render in so short a time the blood unfit to support life, as described by the professor, are circular in diameter, on the average of one seventeen-hundreth of an inch.—They contain a nearly round nucleus of one two thousand-eight-hundreth of an inch in breadth, which, when further magnified, is seen to contain other still more minute spherules of living "germinal" matter. In addition to this, the application of magenta reveals a minute coloured spot at some part of the circumference of the cell. This, besides its size serves to distinguish it from the white pus or lymph-corpuscle. The professor adds to his account

of the action of this powerful poison that he has many reasons for believing that the *materies morbi* of cholera is a nearly allied animal poison, and that if this, on further examination, should prove to be the case, we may hope to know something definite of the poisons of hydrophobia, small-pox, scarlet fever, and indeed of all zymotic diseases.—*Phila. Reporter.*

Report of the Committee on the Prophylaxis of Scarlatina and Rubeola, to the East River Medical Association, July 2, 1857.—Dr. Skiff read the following report, which was signed by all the members of the committee, and which was subsequently adopted as the sense of the meeting:

Keeping within the province of the subject sketched out, it will answer the purpose of the committee to consider such characteristics as are common to both measles and scarlatina. In compliance with this plan, and adopting the hypothesis most generally entertained on the matter of contagion, and the miasm of infection, we observe:

1. Measles and scarlatina are incident to childhood, but may occur at any age.

2. That having occurred once, they constitute usually an immunity against an attack of the same disease.

3. That they are each caused by a miasm extraneous to the human body, and portable by means of fomites.

4. That they are not inoculable, or preventable to any extent by substituting a less fatal or less infectious disease.

5. That they are not peculiar to any social condition of society;—the malign or non-malign characters being mostly dependent on a more or less pernicious epidemic, the peculiar condition or idiosyncrasy of the individual attacked, or the complications which may occur in the course of the disease.

6. That they are self-limiting diseases.

7. That the fatality seems to depend more on the virulence of the particular epidemic than the amount of miasmic infection entering the system.

The committee concluded that:

1. Measles and scarlatina, though originating from causes extraneous to the body, are so commonly prevalent that they are naturally diseases of childhood, but are nevertheless incident to any period of life. As, then, there is no certain exemption from these diseases, it would seem desirable for prudential reasons that they should be contracted in infancy, while the child is surrounded by parents and friends who can supply the adequate nursing and attention.

2. It is evident that if every case of measles and scarlatina

could be completely isolated from the non-infected, and all healthy persons forever unexposed to the poisonous infection, the diseases in question would become extinct. But although this is impossible, the other extreme of allowing a virulent epidemic to prevail without the opposition of the humanitarian or physician would be unreasonable—nay, more, unnatural. The happy mean challenges our attention as at once practical philosophical and charitable.

So then, since a mild form of either measles or scarlatina is a conservator as effectual as the most malignant against a second invasion of the individual, the indications are to avoid the more malignant, if practicable.

3. Practically, the idea may be elaborated thus:

a. Isolation should be enforced in the case of patients suffering from any disease but ill-calculated to bear any additional burden. To these may be added a sub-class of pregnant women.

b. In a serious epidemic, the infected should be isolated from those who have not yet been attacked; to this plan may be added, thorough ventilation, cleanliness, and the use of disinfectants.

In the investigation of the subject under consideration, the committee called upon Dr. Elisha Harris, Secretary of the Board of Health, and received in reply to their questions the following letter:

"Office of the Metropolitan Board of Health,
"No. 301 Mott Street, New York, June 5, 1867.

"In reply to the question—

"1. What sanitary measures are now adopted and suggested by the Board of Health to prevent and to mitigate scarlatina, small-pox, and measles?

"2. What is recommended to the physicians who have patients with these diseases? the following statements are submitted as embodying, in an unofficial form, all the facts on the subject, so far as the officers of the Board have given advice or orders relating to these diseases:

"*a.* The persons sick with any of these diseases among the poor or ignorant classes should be kept isolated entirely from all except the members of their own families or nurses.

"Generally it is expected that a person sick with small-pox or varioloid must be sent to the Small-pox Hospital on Blackwell's Island; and upon most such cases the Sanitary Superintendent issues his official order for the transfer of the sick person.

"*b.* The sick rooms and all that pertains to them must be kept *constantly ventilated*, and the fire-place be kept open, occcasionally or constantly having a little fire in it, if there is such a fire-place.

"*c.* Fresh chloride of lime or flasks of fluid carbolic acid are advised to be kept in the room, placed in secure position.

"*d.* Every article of personal clothing and bedding that has been in contact with the sick person should be placed in boiling water, or in a solution of some positive disinfectant—such as solut. permang. potassa (4 ℥ to two or three galls.) or one of the chlorine solutions. The same dilute solutions of the disinfectants should be sprinkled about the rooms where the sick lie, or, what is better, they may be evaporated from wet clothes suspended. This practice is recommended where there is an epidemic in a crowded population.

"*e.* The cleansing of the houses and premises where any such infectious disease has prevailed is also important. Whitewashing with fresh-slaked lime, or with chloride of lime; scrubbing floors and all woodwork and hard walls with hot solutions of chloride of lime; and the keeping of windows and doors open for several days, are the chief measures.

"This practice is now applied to diphtheria, typhus, typhoid, "spotted fever," and cholera; but the few cases of spotted fever hitherto seen are not supposed to have been infectious; they were surrounded by localizing sources of disease.

"(Signed) "E HARRIS,

"Cor. Secretary Metropolitan Board of Health."

In conclusion, the committee would make the following practical suggestions.

1st. That during an ordinary epidemic of measles or scarlatina, no sanitary measures, except ventilation and cleanliness, should be employed.

2d. That during a severe epidemic of these diseases the following sanitary measures should be adopted:

A. *Isolation.*—The patient should be placed in a room apart from the rest of the family, and attended by a person who has had the disease—no communications being allowed with the rest of the family.

B. *Ventilation* and *Cleanliness.*—The windows of the room should be kept constantly open, and whenever practicable a fire in a fire-place, with a view to add to these means, should be constantly maintained.

The most thorough cleanliness should be insisted upon—and bed-linen ought to be changed as often as practicable.

C. *Disinfection.*—Every article of personal clothing and bedding once in contact with the patient should be steeped in boiling water, or in a solution of the permanganate of potassa (1 oz. of the permanganate to three gallons of water.)

The chamber vessels should be disinfected by a solution of sulphate of iron and carbolic acid.

D. *Fumigation.*—After patients have recovered, the room in which they were sick should be vacated for at least twelve hours,—every window and aperture closed, and upon an iron pipkin or kettle with legs burn a few ounces of sulphur.

Let the room be kept closed for eight hours and then ventilate thoroughly.—*New York Medical Record.*

To Medical Colleges.—At the Convention of Delegates from Medical Colleges, called for the purpose of revising the system of Medical College instruction in this country, and which convened in Cincinnati, May 3d, 1867, the following resolution was unanimously adopted:

Resolved, That a Committee of five be appointed by the President, whose duty it shall be to present the several propositions adopted by this Convention, to the Trustees and Faculties of all the Medical Colleges in this country, and solicit their definite action thereon, with a view to the early and simultaneous practical adoption of the same throughout the whole country. And that the same Committee be authorized to call another Convention whenever deemed advisable.

The undersigned Committee, appointed for the purpose of carrying into effect the instructions contained in the foregoing resolution, respectfully invite the attention of the Trustees and Faculty of each duly organized Medical College in the United States to the five following propositions, which after mature deliberation, were adopted by the said Convention with entire unanimity:

Resolved, 1st. That every student applying for matriculation in a Medical College shall be required to show, either by satisfactory certificate or by direct examination by a Committee of the Faculty, that he possesses a knowledge of the common English branches of education, including the first series of mathematics, the elements of the natural sciences, and a sufficient knowledge of Latin and Greek to understand the technical terms of the Profession; and that the certificate presented, or the result of the examination thus required, be regularly filed as a part of the records of each Medical College.

2d. That every medical student shall be required to study four full years, including three regular annual courses of medical College instruction, before being admitted to an examination for the degree of Doctor of Medicine.

3d. That the minimum duration of a regular annual lecture term, or course of Medical College instruction, shall be six calendar months.

4th. That every Medical College shall embrace in its Curriculum the following branches, to be taught by not less than nine Professors, viz.:

Descriptive Anatomy, including dissections; Physiology and Histology; Inorganic Chemistry; Materia Medica; Organic Chemistry and Toxicology; General Pathology, Therapeutics, Pathological Anatomy, and Public Hygiene; Surgical Anatomy and operations of Surgery; Medical Jurisprudence and Medical Ethics; Practice of Medicine; Practice of Surgery; Obstetrics, and Diseases of Women and Children; Clinical Medicine and Clinical Surgery; and that these several branches shall be divided into three groups or series, corresponding with the three courses of Medical College instruction.

The first or Freshmen series, shall embrace Descriptive Anatomy and Practical Dissections; Physiology and Histology; Inorganic Chemistry, and Materia Medica. To these the attention of the student shall be mainly restricted during the first course of Medical College instruction, and in these he shall submit to a thorough examination by the proper members of the Faculty, at its close, and receive a certificate indicating the degree of his progress.

The second, or Junior series, shall embrace Organic Chemistry and Toxicology; General Pathology, Pathological Anatomy, Therapeutics, and Public Hygiene; Surgical Anatomy and operations of Surgery; Medical Jurisprudence and Medical Ethics. To these the attention of the medical student shall be directed during his second course of Medical College instruction, and

in them he shall be examined at the close of his second course, in the same manner as after the first.

The third, or Senior Series, shall embrace Practical Medicine; Practical Surgery; Obstetrics and Diseases peculiar to Women and Children; with Clinical Medicine and Clinical Surgery in a hospital. These shall occupy the attention of the student during his third course of College instruction, and at its close he shall be eligible to a general examination for the degree of Doctor of Medicine.

The instruction in the three series is to be given simultaneously and to continue throughout the whole of each annual college term; each student attending the lectures on such branches as belong to his period of progress in study, in the same manner as the sophomore, junior, and senior classes, each pursue their studies simultaneously throughout the Collegiate year in all our Literary Colleges.

5th. That every Medical College should immediately adopt some effectual method of ascertaining the actual attendance of Students, upon its lectures and other exercises, and at the close of each session, or of the attendance of the student, a certificate specifying the time and the courses of instruction actually attended, should be given, and such certificate *only* should be received by other colleges as evidence of such attendence."

It will be seen that these propositions are designed to introduce into the system of Medical College instruction in this country, *four changes of* great practical importance, namely:—1st. A positive standard of preliminary education. 2d. A longer time in which to acquire a knowledge of the various branches of Medical Science and practice. 3d. A systematic and successive order of studies for the student. 4th. A certain amount of direct clinical instruction in a public Hospital as a part of the senior course. The desirableness of these changes is too apparent to require either argument or illustration. The plan for accomplishing them, adopted by the convention, as expressed in the foregoing proposition, is simple and easy of execution, provided the several colleges will act in concert.

It requires each college to obtain and place on record sufficient evidence that every student admitted to matriculation possesses a certain amount of preliminary education. It requires *attendance* and *pay* for three annual courses of college instruction, as a condition for graduation; and arranges the whole curriculum of the college into three corresponding series of branches, so that each student can limit his attention to one series each year, thereby laying a foundation and building on it a superstructure in their natural order.

It contemplates such an increase in the number of members of each college Faculty, that four lectures per day can be given to each of the three *classes* in attendance, throughout the whole college term of six months. This would afford a very full course of instruction in each of the three *series* of *branches*, and yet give to the members of each class time fully to digest the instruction received. But as all Medical Colleges contain two and some of them three Lecture rooms, this would be attended by no inconvenience of the Faculty or students. The only valid objection which has been suggested by those connected with the Medical Colleges, is, that the increase in the number of each College Faculty required by the proposed plan, would necessitate a corresponding greater division of the income of each college, and thereby seriously reduce the amount received by any one member. If it is remembered, however, that while the plan requires a moderate addition to the number of members in the Faculties of most of the colleges, it also requires each student to attend and *pay full fees* for three courses of instruction

instead of two, it will be seen that the revenues of each college derived from Lecture fees, will be increased in full proportion to the increase of the Faculty. As most of the colleges have allowed each member of the Faculty to sell his ticket to the class and retain the proceeds as his individual compensation, it has been thought, that the proposed division of the students, attending any given college, into three dintinct classes, and assigning to each a distinct series of branches, would limit the sale of the ticket of any one professor to the special class receiving instruction in his department: and consequently would restrict the income in proportion to the restricted number of tickets sold.

This is simply a misapprehension. The Convention took no action regarding the rate of lecture fees in any of the colleges; but the plan proposed, was founded on the expectation that each student would pay the same aggregate fees annually, as under the old plan. For instance, a student attending his first course and taking out the four tickets of the Freshmen series, would pay the same amount for the four that he now pays for the seven or eight that cover the curriculum in most of the colleges at this time. Hence, although each member of the Faculty would sell a smaller number of tickets, the income from them would be nearly the same. Or each college could have all lecture fees, from the several divisions of the class, paid to a common treasurer, and each member of the Faculty allowed to draw on such treasurer for his proportion of the same.

The 4th section or proposition adopted by the Convention, was not designed to fix the title to professorship in the colleges, but simply to designate what was deemed necessary to constitute a proper Medical College Curriculum, and to determine what part of that Curriculum should be included in each of the *three series* of studies. Uniformity among the colleges in regard to this division into series, is very desirable in order to enable students, if they choose, to attend one series of studies in one college and another series in another without confusion.

To obviate embarrassment in making the change from the present system of college instruction to the one proposed, we would suggest that all students who should have so nearly completed their period of study at the time fixed for making the change, that an attendance on a single additional course of Lectures would render them eligible to graduation, should be allowed to complete their course by attending the *senior* department under the new arrangement; while all who are in the first half of their period of study, should be subject to the new arrangement in full.

That the interest of medical science, the honour of the profession, and the welfare of the people, urgently require important improvements in our system of medical education and medical college instruction, is apparent to all. The public sentiment of the profession as expressed through the National, State, and local Societies, and through the leading medical periodicals, cordially sanctions the plan here proposed. We therefore respectfully ask you to give it a full consideration, and return to the Chairman of the undersigned Committee answers to the following questions:

1st. Do your Faculty, together with the governing authority of your College approve of the several propositions as a whole?

2d. If you do not approve of the plan of revision as a whole, what changes would you suggest?

3d. If you approve of the plan as a whole, or of all its essential features, will your College be ready to adopt it practically, and issue your Annual Announcement for the College term of 1868–9, in accordance therewith; provided all the principal Medical Colleges in this country (or at least those in the cities of Boston, New York, Philadelphia, Baltimore, Richmond, Charleston, New Orleans, Louisville, Cincinnati, St. Louis, Chicago, Buffalo, and Albany,) will agree to do the same at the same time.

The great desideratum is to secure both harmony and concert of action on the part of Medical Colleges, in the adoption of such measures as will at once place the system of medical education in this country on such a basis as the extent of the science and the responsibilities of its practical application in the prevention and treatment of diseases, require.

N. S. Davis, S. D. Gross, Geo. C. Blackman, F. Donaldson, Committee.

M. Bassie's "Huile de Foie de Morne Panee."—The bread is broken and roasted, then made with water into a decoction, strained, and evaporated to the consistency of jelly. Sugar and isinglass are then added; then remove the mixture from the fire; when cooled Tartaric acid is carefully added. The bread jelly is then mixed with the cod-liver oil, and the whole flavoured with canella, essence of lemons, or any fancied article.

MEDICAL NEWS.

"Nulla Dies, Sine Linea."

Dr. J. B. S. Alleyne, one of the Editors of the *St. Louis Med. Reporter*, has recently been elected Professor of Materia Medica and Therapeutics in the St. Louis Medical College; and Dr. F. McArdle Professsor of Chemistry in the Humbolt Medical College, in the same city.—*Boston Med. and Surg. Journal.*

The population of London, i. e. the whole area included in the circle of fifteen miles radius from Charing Cross, is estimated at 3, 521,267 souls; 107,992 births and 80,129 deaths were registered in London last year, both numbers being above the average record, and the excess of births over deaths much less than the previous

year. The mortality was at the rate of 26.5 per 1,000, which is two above the average of the last twenty-seven years.—*Medical Times and Gazette.*

Sulphites in Yellow Fever.—It is said that most flattering results have been obtained by the medical officers of the British fleet now in the West Indies, from the employment of the bi-sulphites of lime, soda, and magnesia, in the treatment of yellow fever. A full dose of castor oil is given at the onset of the disease and scruple doses of the bi-sulphites every few hours during its continuance. Now that this dreaded pest threatens to ravage our southern sea-board, this eminently rational plan of treatment merits a fair trial.—*Phila. Reporter.*

Monument to Laennec.—The sum of twenty thousand francs has been raised in France for the erection of a monument to Laennec, the founder of the science of auscultation. This sum is said by the commission who have the subject in charge to be sufficient for a monument worthy of him and of France. No special efforts have been made to obtain subscriptions outside of France, but sums have been received from the Medico-Chirurgical Society of London, and subscriptions are looked for from the medical societies of Ireland and Scotland, and also from the profession in Austria and Prussia. Our own country ought not to be without representation on the subscription list, for surely no more worthy name adorns the annals of medical science than that of Laennec. The monument, which is a statue of this illustrious man, was modelled by Lequesne, cast by Ducel, and is now on exhibition at the Paris *Exposition.* The ceremony of inauguration will take place in the latter part of May, 1868.—*Boston Medical and Surg. Journal.*

Dr. Richardson, of London, the proposer of the Ammonia theory of the coagulation of the blood, retracted the theory in a paper read at the late meeting of the British association at Dundee.

At the recent meeting of the Trustees of the University of Virginia, Dr. J. F. Harrison, of Richmond, Va., was elected to fill the Chair of Obstetrics, Practice of Medicine and Jurisprudence, made vacant by the resignation of Dr. Howard. The present opportunity is embraced of congratulating the present incumbent, upon the honour of being elected to so prominent a position, and of expressing a regret that (on account of absence from the City) this notice was not inserted in the September number of the Journal. Dr. Harrison's election has been acceptable to a large circle of his friends who feel confident of his ability to, creditably and efficiently, discharge the onerous duties devolving upon him.

EDITORIAL.

"Nullius Addictus Jurare in Verba Magistri."—Hor.

In the last number of this Journal, after a few prefatory remarks, upon the subject of mineral waters, there was given the analysis of several of the most important Springs West of the Blue Ridge Mountains in Virginia.

There is, herewith, appended the analysis of other Springs; these completing the information desired, in this respect, by most Physicians who wish to have acceptable information in regard to these celebrated waters.

"The 'Salt Sulphur' proper was discovered by Erwin Benson, Esq., in 1805, when boring for salt water, which he was induced to believe might be found there, from the fact that, in *old times*, the spot had been a favorite 'Lick' for deer and buffalo. This spring is neatly enclosed in a marble reservoir, two feet square, and about two feet ten inches deep, and is protected from the weather by a neat and comfortable edifice.

The following is the *analysis* of this water, as furnished by Professor Rogers:

Temperature variable from 49° to 56°.

Solid matter procured, by evaporation, from 100 cubic inches, weighed, after being dried at 212°, 81·41 grains.

Quantity of each solid ingredient in 107 cubic inches, estimated as perfectly free from water:

1. Sulphate of lime	36·755	grains.
2. Sulphate of Magnesia	7.883	"
3. Sulphate of Soda	9·682	"
4. Carbonate of Lime	4·445	"
5. Carbonate of Magnesia	1·434	"
6. Chloride of Magnesium	0·116	"
7. Chloride of Sodium	0·683	"
8. Chloride of Calcium	0·025	"
9. Peroxide of iron, from proto-sulphate	0.042	"

10. An azotized organic matter, blended with Sulpur, about ..... 4 grains.
11. Earthy phosphates ..... a trace.
12. Iodine.

Volume of each of the gases contained in a free state in 100 cubic inches—

Sulphuretted hydrogen	1·10 to 1·50 cubic inches.
Nitrogen	2·05 "
Oxygen	0·27 "
Carbonic acid	5·75 "

The following results give in one view the composition of the Red Sulphur Spring water:

Gaseous contents of a gallon, or 233 cubic inches—

Carbonic acid	5·750
Nitrogen	6·916
Oxygen	1·210
Hydro-sulphuric acid	0·397
	14·264

50,000 grs. (nearly seven pints) of this water contain dissolved as gases, (grain measure)—

Carbonic acid	1245
Nitrogen	1497
Oxygen	260
Hydro-sulp. acid	86
Grain measures of gases	3088

50,000 grs. of this water afford of—

Silicious and earthy matter	0·70
Sulphate of soda	3·55
Sulphate of lime	47
Carbonate of lime	4·50
Carbonate of magnesia	4·13
Sulphur compound	7·20
Carbonic acid	2·71
	23·26

Mr. Hayes, from chemical examinations, comes to the conclusion

that the red colour of the matter, which is deposited on the slabs, etc., etc., is that of moss or lichen, which finds its habitat in the viscid covering produced by the deposition of the sulphur compound.

The waters of the Hot Springs have been analyzed by Professor William B. Rogers, formerly of the University of Virginia. The saline ingredients in one hundred cubic inches of water are—

Carbonate of lime	7·013
Carbonate of magnesia	1.324
Sulphate of lime	1.302
Sulphate of magnesia	1·530
Sulphate of soda	1·363
Chloride of sodium and magnesium, with a trace of chloride of sodium	0·105
Proto-carbonate of iron	0·096
Silica	0·045
	12·778

The free gas consists of nitrogen, oxygen and carbonic acid gas. It also contains a mere trace of sulph. hydrogen.

The saline contents of one gallon of the water of the Warm Springs are as follows:

Muriate of lime	3·968
Sulphate of magnesia, (Epsom Salts)	9·984
Carbonate of lime	4·288
Sulphate of lime	5·466
And a trace of soda	0·000
	23·706

The following is the analysis of the Warm Spring water by Mr. Hayes, of Roxbury, Massachusetts:

"In physical characters, this water resembles ordinary chalybeate waters. Recently drawn, it is clear, colorless and in some degree sparkling, when agitated. Its taste is styptic or ferruginous, leaving the impression of a large amount of mineral matter being present. Agitated in the atmosphere, it becomes turbid, and deposits in filaments an ochry matter, consisting of oxide of iron and organic matter.

"The dissolved gaseous matter is carbonic acid, with nitrogen; no oxygen is present. By heat it is rapidly changed, the deposit of ochry matter increasing in density, while gas is disengaged.

"A standard gallon of this water, weighed at 60° Fahrenheit, afforded the following proximate constituents:

1st bases:	Sulphuric acid	9·443 grains.
	Carbonic acid	9·210 "
	Silicic acid	0·990 "
	Organic acid	1·525 "
2d bases:	Potash	0·741 "
	Ammonia	0·119 "
	Lime	8·906 "
	Magnesia	0·444 "
	Protoxide of iron	0·973 "
	Alumina	0·290 "
		32·632

"The change produced in this water by exposure to the air, or by heating it, indicates that the protoxide of iron exists in the water, united with organic acid. When silver salts are mixed with the freshly drawn water, the decomposition which follows is not attended with the coloration which humic and apocrenic acids produce. The deposition, too, is largely mixed with oxide of iron. These, with other considerations, induce me to state that the protoxide of iron is united with crenic acid. In the further apportioning of the bases, by which we theoretically make up the salts supposed to exist formed in this water, the magnesia and alumina are combined with hydrous silicic acid, to form a compound soluble in carbonic acid and water. The remaining bases, then, constitute salts, which, through the influence of chemical affinities, are—

Sulphate of potash	1·371 grains.
Sulphate of ammonia	0·369 "
Sulphate of lime	14·531 "
Carbonate of lime	4·220 "
Crenate of iron	2·498 "
Silicate of magnesia and alumina	1·724 "
Carbonic acid	6·919 "
	32·632

In the preliminary examination of this water, it was deemed remarkable that so small a weight of iron salt should impart so sensibly a chalybeate taste to so large a volume of water. Neither the carbonate nor sulphate of iron has this effect, and the only explanation is that alluded to above; the existence of a cremate dissolved in carbonic acid so as to form an acidulous water. This compound with the lime salts may be considered as the active medicinal parts of the water."

The properties of the waters of these, the chief Springs of Virginia, will be given in a future number.

OBITUARY.

Died at his residence, "Glenwood Cottage," in Accomac Co., Va., July 28th, 1867, Dr. Edwin W. LeCato, aged 37 years.

Of his exemplary habits, of his sound and unswerving integrity, of his gentle and manly deportment in his private and professional intercourse with the world, it does not become the writer to speak. It is enough to say, that those who knew him best, loved him most. As a physician he was an indefatigable student, an eminently careful and successful practitioner, and his untimely death, in the midst of a career full of usefulness and promise, is deeply mourned by a large circle of warm and admiring friends. In the hearts of all these, his memory will live embalmed by the warmest and tenderest recollections of professional assiduity and untiring devotion.

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NOTICES.

☞ Prizes offered by the Conn. Medical Society for 1868. The undersigned, a Committee of the Medical Society, offer, in behalf of said Society, the following prizes, to be awarded in May, 1868, viz: They renew the offer of the Jewett Prize of Two Hundred Dollars, for the best essay on the question, "*By what hygienic*

means may the health of armies be best preserved?"* They also offer the Russell Prize of Two Hundred Dollars, for the best essay on the subject, "*The Therapeutic Uses and Abuses of Quinine and its Salts.*"

The offer of both these prizes is extended to all physicians and surgeons of the United States, and of the British Provinces of North America. In awarding the Prizes, the Committee will feel authorized to regard the literary merits, as well as the professional and scientific value of the papers submitted; and should none be received which they think worthy of such generous prizes, they may take the liberty of witholding their decision until the offer can be renewed.

Competitors will send their essays, free of expense, to one of the Committee, on or before the first of March, 1868, each having on it a motto or device, which shall also be written or placed on a sealed envelope, inclosing the writer's name and address. The unsuccessful essays will remain with that member of the Committee in whose hands they were originally placed, subject to the order of their respective authors.

[It has been stated, that a degree of health which is unusual prevailed in the Union armies during the late war, and the mortality from disease was much below the average in the great military campaigns of Europe. Is there truth in the statement? If true, to what extent is it so, and why is it? What are the facts? What is the explanation? These are transcendantly important questions, to which the Committee can find no answer in the essays which have been offered for the Jewett prize. They would not presume to direct the inquiries of competitors, but in this way, (parenthetically as it were,) suggest a topic for consideration.]

BENJAMIN H. CATLIN, M. D., of West Meriden,
LEONARD J. SANFORD, M. D., of New Haven,
HENRY BRONSON, M. D., of New Haven,
MELANCTHON STORRS, M. D., of Hartford,
CHARLES L. IVES, M. D., of New Haven,
} *Committee.*

* Those who forwarded essays on this question last year, are requested to let them remain until a decision is made, or recall them, through a friend, for alteration.

☞ The Editors of this Journal, after fairly trying a liberal policy, for the convenience of many whom the late war left without pecuniary resources, have determined to adopt a complete and permanent change.

Letters, in all respects polite, have been written to very many who had entirely neglected the liquidation of their accounts; to the writer of these letters, there has seldom been manifested the ordinary courtesy of a reply; yet such gentlemen have continued to receive the Journals sent to them. Such a course needs no comment, and each subscriber knows to whom the charges of injustice, discourtesy and illiberality are applicable. The Editors trust that these charges will be appropriately applied.

The credit system, under such circumstances, is therefore abandoned. Apart from its risks, which may be successfully borne, it entails an enormous correspondence upon the Editors, and this painful, expensive, and often futile labour, will no longer be performed.

Notice is then given, that no number of this (the fourth) volume, or of any future volume, will be furnished to any one, unless the amount of subscription is sent with the order. When the period of any subscription terminates, the Journal will be discontinued, unless the amount due for its continuance, is punctually forwarded.

The Journal will be discontinued to all who are in arrears, after the September number of the present year, and for the protection of the Editors, all means practicable will be instituted, for the collection of the amounts respectively due.

The special arrangements made with a few gentlemen, for this year, will, of course, be respected, and to them the Journal will be continued for the year; though it is asked, that, if possible, the the amounts due be forwarded.

The fact that the number who pay promptly is sufficient to fully sustain the Journal, when it is not sent to unremunerative subscribers, and the unsatisfactory experience in regard to those who do not appreciate a credit extended to them, induce the Editors

to adopt this course. All in arrears are respectfully asked to liquidate their accounts, long since due.

To all, the Journal will hereafter be furnished, only on the terms specified.

☞ All gentlemen whose letters require a reply, are respectfully requested to enclose a stamp. This stamp is but a small expense to the writer of the letter, while the very heavy correspondence which has been developed with the Journal Office, makes the cost of stamps a serious tax. This usual request has long been postponed. It is now made with reluctance, and it is hoped that all correspondents will recollect it.

☞ Short Articles.—It is requested, that articles contributed for this Work, should be brief and practical. With few exceptions, long communications are distasteful to readers and are generally neglected; it is difficult to make room for them. Papers of merit are retained for many months, when, if the valuable truths contained were briefly presented, they would be promptly published. It is the desire of the Editors of this Journal to increase, relatively, the Eclectic Department, and, to effect this, original papers of limited extent are preferable.

☞ Where manuscript is sent to the Editors of this Journal, all writers are respectfully requested to state whether remuneration is desired.

There is such a difference in the intention of those writing for this Work, that it is necessary to make this request.

☞ Notices to Subscribers, Advertisers, Contributors and Correspondents.

Receipts for all amounts transmitted, will be sent in the Journal, for the succeeding month.

It is desired to obtain for this Journal one Agent in every City and Town.

All communications sent by mail should be directed to Dr. B. S. Gaillard, Locked-Box 32 Richmond, Va.

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BOOKS AND JOURNALS RECEIVED.

A Treatise on Human Physiology; Designed for the use of Students and Practitioners of Medicine. By John C. Dalton, M. D. New York. Henry C. Lea. 1867. Philadelphia. From Publishers.

Eulogium upon the Life, Professional Labours and Public Services of Joseph Mather Smith, M. D. New York. By Wm. C. Roberts. Anson D. F. Randolph. New York. 1867.

A Biennial Retrospect of Medicine, Surgery and other Sciences. Edited by Wm. H. Power, Dr. Anstie, Mr. Holmes, Mr. Thomas Windsor, Dr. Barnes and Dr. C. Hilton Fagge. For the New Sydenham Society. Lindsay & Blakiston. Philadelphia. 1867. From Publishers.

Angular Curvature of the Spine. By Benj. Lee, M. D. J. B. Lippincott & Co. Philadelphia. 1867. From Publishers.

"Is It I?" A Book for Every Man. By Prof. H. R. Storer, M. D., of Boston. Lee & Shepard. Boston. 1867. From Publishers.

Transactions of the American Medical Association. Vol. 17. 1866. From Publishers.

Inversion of the Womb. By Frank A. Ramsey, M. D. Memphis. 1867. From the Author.

Descriptive Catalogue of Educational Works and Works in Science and General Literature. Walton & Maberly. London. 1866.

The following domestic Exchanges are regularly received:

The Atlanta Medical and Surgical Journal, Ga.
Boston Medical and Surgical Journal, Mass.
Braithwaite's Retrospect, New York.
Buffalo Medical and Surgical Journal, New York.
Chicago Medical Journal, Illinois.
Chicago Medical Examiner, Illinois.
Cincinnati Lancet and Observer, Ohio.
Druggist's Circular and Chemical Gazette, Philadelphia, Pa.
Galveston Medical Journal, Texas.
Journal of Applied Chemistry, Philadelphia, Pa.
London Lancet—Reprint—New York.
New York Medical Record, New York.
New Orleans Medical Journal, Louisiana.
New York Medical Journal, New York.
Pacific Medical and Surgical Journal, San Francisco, California.
St. Louis Medical and Surgical Journal, Missouri.
Southern Journal of the Medical Sciences, New Orleans, Louisiana.
Southern Medical and Surgical Journal, New Orleans, La.
The American Journal of Pharmacy, Philadelphia, Pa.
The American Journal of Medical Sciences, Philadelphia, Pa.
The Dental Cosmos, Philadelphia, Pa.
The Detroit Review, Mich.
The Medical and Surgical Reporter, Philadelphia, Pa.
The St. Louis Medical Reporter, Mo.
The Western Journal of Medicine, Indianapolis, Ind.

The Journal of Materia Medica, Lebanon, N. Y.
The Leavensworth Medical Herald, Kansas.
The American Journal of Dental Science, Baltimore, Md.
The Quarterly Journal of Psychological Medicine, N. Y.
The Medical Gazette, New York.

FOREIGN EXCHANGES.

The London Lancet.
The Ophthalmic Review, London, Eng
The Medical Mirror, London.
The Canada Medical Journal, Montreal.
The Dublin Quarterly Journal of Medical Sciences, Ireland.
Le Mouvement Medicale, Paris, France.
Journal de Medicine Mental, Paris, France.
Revue Medicale, Paris, France.
Revue de Therapeutique Medico, Chirrugicale, Paris, France.
The Medical Press and Circular, Dublin, Ireland.

MISCELLANEOUS.

The American Naturalist, Salem, Mass.
De Bows' Review, 80 Broadway, New York.
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ORIGINAL COMMUNICATIONS.

"Qui Docet Discit."

Art. I.—The Dangers of Jaundice Occurring During Utero-Gestation—Its Tendency to Produce Abortion, Coma, Convulsions and Other Nervous Phenomena. By Robert B. Nelson, Charlottesville, Va.

No period in the history of medical science has offered to the diligent enquirer after knowledge greater attractions than the present. At no time have the labours of careful and accurate observers been more surely and signally rewarded with useful and striking results; and in no part of this fruitful field of research have developments contributed more to the advancement of medical knowledge, than in the acquisitions furnished by the study of morbid phenomena connected with blood poisoning; unless, indeed, it may be in the discovery of those mysterious and suggestive truths revealed by investigations into the healthy functions and diseased actions of that wonderful structure, the nervous system.

The developments in these two departments of medical science furnish many of the practical results, which have contributed to the progress of medical knowledge. What, for instance, has thrown more light upon the study of pathology, or aided us more in the diagnosis of many otherwise obscure diseases, than our knowledge of the constitution of the blood in health and its varying condition

in different diseases, as shown by the comparative analyses of Andral and Gavarret, Becquerel and Rodier, or the experimental researches of Braun and Heller, Bright, Bennett, Todd, Flint and numerous others? Or again, what has aided us more in our attempts to comprehend the operation of morbific causes upon the nervous centres, than the careful and accurate investigations of Hall, Müller, M. Flourens, Brown-Séquard and Handfield Jones?

Whilst it is not claimed that these, or any other observers, have in every instance of blood poisoning, detected and eliminated each atom of morbific matter, or in nervous disorders, shown with unerring certainty, the exact condition of the nervous centres, and their precise deviation from the standard of health, they have established beyond controversy, certain facts, from which are deducted valuable principles for our guidance in the study of disease. Thus it has been shown that any disturbance of the relative proportions of the constituent elements of the blood, affecting the nutrition of the nervous system, or the retention and accumulation of excrementitious matters, acting directly as a poison upon the nervous centres, will become sure sources of disease, and may give rise to the worst forms of nervous disorder.

Guided by the results which have followed the labours of these and other observers, I propose to examine the fatal form of Jaundice, especially as it occurs amongst pregnant females, and to enquire whether it is not a true blood poisoning, the toxic effect of which upon the nervous centres will explain most of the morbid phenomena connected with it. It is not maintained that this form of the disease is limited to pregnancy, the fatal cases reported by Budd and Griffin occurring in children, and the experience of every practitioner, who has seen the disease in a malignant form, sufficiently refuting any such assumption, I shall endeavour to show only how fearful a complication of pregnancy it is; what are the chief sources of danger; and what, in the present state of our knowledge, seems most likely to be the fatal element.

The following cases may be taken as examples of this formidable malady.

Case I.—Called Feb. 1858, to see Mrs. E., advanced eight and a half months in pregnancy. This patient had been visiting a short

time previously in a family, nearly all of whom had jaundice, and was now suffering with that disease herself, the most distressing symptoms being constant nausea and occasional vomiting.

When I reached this patient at 3 P. M., I found her in labour well advanced, the membranes ruptured, the head presenting and just entering the inferior strait. After a few pains the child was born, and finding the hæmorrhage considerable, I removed the placenta and proceeded to make the womb contract, by means of friction, cold applications to the abdomen, and the use of vin. ergotæ. The womb responded feebly and slowly to these means, contracting for a few moments and then relaxing again. The efforts to arrest the hæmorrhage were kept up for several hours, when the womb being firmly contracted, all seemed well, except continued nausea and occasional vomiting.

The jaundice increased in intensity during the night and all the succeeding day, the skin becoming a deep yellow, and the nausea and vomiting continued unabated.

Calomel given in a full dose, and large mustard plasters to the stomach, mitigated the severity of the symptoms, and there was apparent improvement, until the following day (Saturday) at 10 o'clock A. M., when violent hysterical symptoms appeared, accompanied by wild delirium and great restlessness. The pulse rose to 144 and became irregular, intermitting about every eighth beat.—Applied large mustard plasters over the whole chest, to the stomach and extremities: gave antispasmodics and morphia freely, and in a few hours the violence of the symptoms again abated; she still, however, continued restless, throwing herself about the bed, raising up on her elbows, and attempting to get out, talking incessantly and incoherently.

At 6 P. M., the patient had taken one grain sulph. morphiæ; ordered half a grain every hour, until one grain and a half more had been taken; also gave pilul. hydrarg. gr. v. every two hours until 30 grains had been taken, when copious bilious evacuations indicated restored hepatic actions.

Four or five hours sleep were obtained and the patient awoke with all the symptoms greatly ameliorated. The restlessness, however, continued through the whole day, Sunday. At 10 P. M.,

gave half a grain sulph. morphiæ, and soon followed it with one-fourth of a grain more; she laid awake, but quiet all night, and on Monday was decidedly better. From this time the improvement continued steadily, the nausea and distressing yellowness of vision being the last symptoms that disappeared. The latter of these, though unusual, was truly annoying throughout this whole case.—Frank met with only five cases of yellow vision in several thousand of jaundice.

Case II.—Called to visit Mrs. B., pregnant eight months; has had jaundice for some days, with tendency to coma; skin and eyes now of a deep yellow colour. Urine has been dark, and nausea distressing from the commencement of the attack. When I reached this patient I found her raving with delirium, tossing herself about in bed; attempting to get out, screaming and talking incoherently. In a few hours profound coma came on, and death soon followed.

Case III.—Called in consultation with Drs. C. and M. to visit Mrs. F., eight and a half months advanced in pregnancy; has a severe attack of jaundice. Found this patient in a convulsion; has had several, with coma and delirium in the interval. Labour had begun and was rapidly advancing. In a short time she gave birth to a child sometime dead. Convulsions, delirium, and great restlessness continued for 24 hours, when death relieved her of suffering.

A number of cases of jaundice in pregnant females, have been collected by Prof. Lebert of Zurich,* which furnishes the following fearful statistics. In one, the mother miscarried at the eight month: in three others, all aborted, two being fatal: in a fifth case the mother miscarried and died; in two others the disease proved fatal at the seventh month, premature labour having first taken place. Thus of 10 cases, including the three above mentioned, as occurring under my own observation, 7 died, and all miscarried, except one, who died comatose, in about 24 hours after the appearance of violent symptoms.†

* Braun on Uræmic Convulsions.

† Dr. Horatio C. Wood has also reported an interesting case of jaundice, occurring in the sixth month of pregnancy, in which both mother and child perished.—*Am. Jour. Med. Sciences*, April 1867.

Of the fœtuses, two perished in the first three cases described. Prof. Lebert unfortunately does not inform us of the mortality in the cases reported by him. But in so large a number of abortions, it must necessarily have been great. And in this fact we find the explanation of that peculiar interest which all the diseases of pregnancy possess, especially those of a grave character; that whilst they endanger the life of the mother, they also necessarily compromise the safety of her helpless and dependent offspring.

Why then is jaundice so prejudicial to the pregnant female? Is it only because of the substitution for healthy nutritious blood, of blood deteriorated and deficient in the elements of nutrition? Or is it not rather on account of the thorough contamination of the blood, by noxious excrementitious matters, which in consequence of the failure of some important emunctory function have not been eliminated but have accumulated in the blood, constituting a true blood poisoning or veritable toxæmia? And if the latter be true, what is this poisonous principle, the direct influence of which upon the cerebro-spinal system, is productive of such fearful nervous phenomena, and the existence of which in abnormal quantity during pregnancy, almost surely portends the death of both mother and child?

That these are cases of toxæmia, or true blood poisoning, there can scarcely be a reasonable doubt. For however much we may dread the opprobrium of humoral pathology, or deplore the revival of so dangerous a heresy, we are still driven to the admission, that a noxious excrementitious element of the blood, retained and consequently accumulated, is as truly a "Materies Morbi," as the introduction of foreign matters. Hence the failure of the liver to eliminate the poisonous elements of the bile, constituting cholæmia, or of the kidneys to eliminate the urea, constituting uræmia, gives rise to blood poisoning, as surely as the absorption of pus, or the inoculation of the system with variolous matter.

Neither can there exist a doubt that any form of toxæmia, occurring during utero-gestation, is a truly dangerous complication. This is clearly recognized in the warnings which abound in works on females, and their diseases during pregnancy. Dr. Meigs cautions us in the most emphatic terms against vaccination in the

pregnant females, as almost sure to produce pyogenic fever, with all the horrors of pyæmia. Dr. Bedford, in speaking of the centric causes of convulsions, directs special attention to the impure condition of the blood, from certain poisonous properties contained in the urinary secretion. And in a paper published in Sept. 1853, entitled "Thoughts on Uræmia," he combats the idea, that there is any direct connexion between albuminuria and puerperal convulsions, maintaining that they do not necessarily stand in the relation of cause and effect, but that the convulsions are often nothing more than uræmic phenomena, or in other words the direct action of urea, (supposed to be poison when retained in the blood and converted into carbonate of ammonia*) upon the cerebro-spinal nervous system. Dr. Gail R. Braun of Vienna, in his admirable monograph on the uræmic convulsions of pregnancy, parturition and child-bed, shows conclusively, that if the kidneys fail to eliminate the urea, we have a true toxæmia, which so affects the brain and whole nervous system, as to produce the worst form of uræmic eclampsia.

Fearful, however, as are these forms of blood poisoning, statistics show that none can be more so in their effects upon the pregnant and parturient female, than cholæmia. Yet we are at a loss to reconcile a just appreciation of this terrible complication, with the meagre and unsatisfactory accounts of it found in works on females and their diseases, as compared with other forms of toxæmia. It is chiefly in the latter stages of pregnancy, that this frightful malady shows itself in its most malignant form, terminating them in abortion, coma, convulsions, and other nervous phenomena, and proving a disease truly dangerous, to both mother and child.

The death of the fœtus, and its consequent expulsion, does not surprise us when we remember that the only source from which it can obtain sustenance is poisoned, and that instead of receiving a supply of healthy nutritious blood, the mother furnishes her

* Frerichs advances the opinion that uræmia is not due directly to the presence of urea in the blood, but to the conversion of this substance into carbonate of ammonia, through the agency of a ferment supposed to be present in the circulating fluid. This view has been adopted by Braun, but has been controverted by Schottin, Zimmerman, Gallois, Hammond, Bernard and others. *Physiological Memoirs, by Hammond.*

offspring with blood loaded with poisonous excrementitious elements. That the blood is not purified in its passage through the placenta, but reaches the fœtus charged with noxious elements, may be easily shown. Thus in such cases the fœtus generally dies and is expelled, affected with the disease from which the mother is suffering, as indicated by the colour of the skin, and of all the fluids of the body. And again cases have occurred in which the children were attacked soon after birth with convulsions similar to those of the mother, and produced no doubt by the same cause.

Why nature so beneficent in all her designs, and so wonderful and considerate in all her provisions for the safety of the tender offspring, should thus discriminate between the fœtus in utero, and the infant at its mother's breast, allowing in one case, the only source of nourishment to become poisoned, whilst in the other, by a wise and bountiful arrangement, the milk remains, amidst the general impregnation of the fluids with bile, pure and untainted, is not easily explained.

In this peculiar form of jaundice, affections of the brain and nervous system constitute the characteristic features, and the chief sources of danger. And though they are not to be wondered at, the varied and conflicting opinions as to the cause of these nervous disturbances, are far from being satisfactory. Amongst the earliest and most threatening of the nervous manifestations is coma. This, it has been well said, "may and does exist with the most varied and opposite states of the brain." Its most frequent and obvious cause being pressure, some have explained its occurrence by the undue pressure of the blood, arising from the fact that the circulation is retarded in all the abdominal viscera, by the enlarged uterus.

Coma may also depend upon a deficient supply of nutritious blood, and it has with much reason been alleged, that the blood, deteriorated and loaded with bile, does not furnish proper nutriment to the brain. It has also been maintained, that there is a direct sympathy between the liver and the brain, which in the pathology of jaundice, has been too little considered. Albuminuria has also at different times been assigned as the true cause of coma in these cases.

Dr. Griffin, of Limerick, in the Dublin Medical and Chemical

Journal, "has drawn an analogy between the suppression of bile in jaundice and the suppression of urine in diseases of the kidneys, and thinks the affection of the brain common to both." Dr. Flint, in his late work on practice says, "that post mortem examinations, show an accumulation of granules of blue pigment in the uriniferous tubes of the kidneys, causing a true uræmia, which may produce coma, convulsions and other nervous phenomena.

"The real cause, however, of coma, and other nervous manifestations in most cases of cholæmia will be found, we think, to depend neither upon pressure, exhaustion, sympathy, albuminuria, nor uræmia, but to consist in the direct action upon the cerebro-spinal system, of some poisonous excrementitious element of the bile, which the liver has failed to eliminate, and which has consequently accumulated in the blood, constituting a true toxæmia. The same poisonous principle, which by its action on the brain produces coma, may, and no doubt does, produce convulsions, by its action upon the spinal cord and medulla oblongata, giving rise to true cholæmic eclampsia. Rokitansky recognizes this form of eclampsia, "as arising from the blood being over charged with the constituent elements of the bile, and the products of their decomposition, and depending upon acute atrophy of the liver, connected with the puerperal diseases of pregnancy, labour and child-bed."

It has not been positively determined what elements of the bile, or what products of their decomposition, exercise this poisonous influence on the nervous centres. Budd, after rejecting various other suppositions, as to the real cause of the poisonous influence excited upon the brain and nervous system, offers in explanation of the fact, the surmise, that in consequence of decomposition some peculiarly noxious agent is evolved, in the lobular substance of the liver, which is the real cause of the malignant symptoms." "Frerichs thinks the formation of leucins* and tyrosin, crystalline products of the decomposition of albuminous substances, may produce cholæmic eclampsia. Barnberger thinks it more probable that cholæmic cerebral phenomena, are produced by the acids of the

* The case of Leucinosis, reported by Dr. Horatio C. Wood, seems to favour this view.—*American Journal Medical Sciences*, April 1867.

bile resin (taurocholic and glycocholic) and by the products of their decomposition, than by the biliary pigments."*

The varied and conflicting opinions of these and other accurate observers, show how far this poisonous element, has eluded the grasp of the most careful and searching investigations.

Aided, however, by the accumulated knowledge of these and various other observers, and guided by the light which has fallen along their pathway, recent investigators have directed special attention to a peculiar form of blood poisoning arising from the retention, and accumulation in the blood, of cholesterine. This is an excrementitious element of the bile, which, according to modern physiology, originates in the substance of the brain and nervous tissue, and is absorbed and conveyed by the blood to the liver, where it is eliminated and discharged.† And in the present state of our knowledge there are good reasons for believing that this is the poisonous principle which, in cholæmia, produces such baneful influences upon the cerebro-spinal nervous system.

Experiments made by Braun and Heller‡ show, "that the blood drawn in cholæmia, after numerous eclampsia fits, separated itself into clear serum, and a light red, bulky, moderately consistent clot, covered with spongy fibrin, tinged yellow by a gall pigment. The serum treated first with alcohol, and then filtered, contained very little urea and sugar, much cholesterine and choleic acid. The blood consequently had not the uræmic, but the cholæmic constitution, as it contained no carbonate of ammonia (which in uræmia was then supposed to be the fatal element); but all the constituent elements of bile." These observations, confirmed as they have been by others, show that the explanation of these morbid phenomena is not found in the existence of uræmia, but that the excrementitious elements of the bile, prominent amongst which is cholesterine, may produce cholæmic eclampsia.

* Braun on Uræmic Convulsions.

† I regret not having had access to the article entitled "Experimental Researches into a new Excretory Function of the Liver, consisting in the removal of Cholesterine from the Blood, and its Discharge from the Body in the form of Stercorin." By Professor Austin Flint, Jr., published in the American Journal of Medical Sciences, October 1862.

‡ Braun on Uræmic Convulsions.

Becquerel and Rodin, in their comparative analyses of the blood in various diseases, show that in cholæmia, the serum is always tinged with bile pigment and that there is an accumulation of cholesterine and other fatty matters, amounting often to more than double their normal quantities.

Dr. Flint* speaking of the presence of bile pigment in the blood, or cholæmia says, "that the bile does contain one excrementitious element, cholesterine, and if from any cause the secretion of the liver be suspended, this constituent of the bile will accumulate in the blood. Again: all clinical observers have seen exceptional cases of cholæmia, in which the bile appears to exert an intensely noxious influence on the nervous system, inducing coma and death. Excluding cases in which the supervention of uræmia may account for these results, they may be attributed to the retention and accumulation of the excrementitious elements of the bile in the blood and perhaps especially cholesterine. There are also good grounds for believing that the accumulation of cholesterine in the blood, gives rise to a special form of blood poisoning called cholesteræmia."

These views, it is believed, fairly represents the present state of our knowledge on this intricate and interesting subject. And if they be true, we can hardly fail to recognize in the existence of cholesteræmia, the most satisfactory explanation of the morbid phenomena which characterize cholæmia and to associate this form of blood poisoning and cholæmic eclampsia in the relation of cause and effect.

Chevereul detected in human biliary calculi a peculiar crystalline matter, which he named cholisterine. Foucroy considered it analogous to adipocire, and so named it. But Chevereul has shown it to be an independent principle."† We now know that it is a non-saponifiable fat, always present in the bile, and the chief constituent of colourless gallstones. That it is not formed in the liver, but eliminated by it, having been first absorbed from the substance of the brain and nervous tissue, is proven by the researches of Professor A. Flint, Jr., who has found nearly one-fourth more of

* Flint's Practice.

† R. Venables.

cholesterine, in the blood of the jugular vein returning from than in the carotid artery going to the brain. He has also found that the blood of the hepatic artery and portal vein, lose cholesterine in passing through the liver, so that but little of it is found in the hepatic veins.*

It is also found to exist in large quantities when, from any cause whatever, the other fatty constituents of either the solids or fluids of the body are increased. Thus Beale, Paget, and other observers, say, "that atheromatous deposits contain numerous oil globules, with granular matter, partly fatty and partly albuminous aggregations of minute fat globules, and much cholesterine, which appears generally to have crystallized out, having been originally deposited in a state of solution in the oil. Cholesterine is also always found dissolved in the oily fat in cases of fatty degeneration of various organs."

The immense amount of fatty matter sometimes discharged from the bowels in jaundice, as shown by Elliotson, Bright, Lloyd and numerous other observers, may also go to explain the increased quantity of cholesterine circulating in the blood in this disease.

There are also good grounds for believing that the amount of this element of the bile is increased during pregnancy, especially in females of full habit, indolent modes of life, sedentary occupations, and who live upon highly nutritious and stimulating food. If, in addition to the increased quantity of this noxious element, and the general hyperæmic condition of the pregnant female, the secretory function of the liver be arrested, from atrophy, glandular degenerations, or any other cause, we have all the conditions necessary to the worst form of cholæmic eclampsia.

ART. II.—TETANUS—RECOVERY. By H. C. SOMERVILLE, of White Post, Clarke Co., Va.

J. H. McC., aged 14 years and six months, a youth of delicate constitution, received an injury July 9, 1866, by being thrown

* Dalton's Physiology.

from a horse. In the fall his head struck a rock, which made a wound of about an inch in length, just above and to the left of the occipital protuberance. This wound, so far as could be ascertained, only involved the soft parts, though it was not seen by me until perfectly healed. From the appearance of the cicatrix, I suppose it had healed by the first intention; also from the fact that he had suffered no inconvenience from it. He was in the habit, shortly after receiving this injury, of going with other boys to a stream of water, near by, to bathe, build dams and play in the water, for one hour or more at a time. This practice was repeated twice or more during the day and for several days in succession. I was told that they would plunge in the water, at mid-day, when perspiring freely, and that too during the extremely hot days of July. About 21st of same month, patient began to complain of some soreness, and particularly stiffness about the neck. On this account, he was prohibited from going to the water. I was first called to see him July 28th; found him sitting on the edge of the bed; complained of his neck being stiff and painful; said his jaws hurt him here (pointing to the angles of the jaw), and that he could not use it without causing some pain. His tongue was slightly coated and there was some excitement about the circulation. I was under the impression that he was suffering from cold, which seemed to be assuming a rheumatic form, the result, as I supposed, of his imprudence in bathing, &c. I ordered a full dose of calomel and Dover's powder at night, and his neck and jaw to be well rubbed with a liniment of ol. turpentine and lard, applied warm. I also ordered a blister-plaster to each angle of the lower jaw and feet bathed.

I saw the patient this evening again (29th.) Medicine of yesterday had acted well; bowels moved freely; skin in a tolerably good condition. Well marked symptoms of tetanus, now developed, having both trismus and opisthotonos. He lay exclusively on his back, with his head drawn back—neck and body quite rigid—jaws firmly closed and the countenance exhibiting a peculiar and unearthly expression, having the risus sardonicus, and with it an unnatural, strange and wild expression of the eyes. He has frequent paroxysms of severe spasms of all the muscles of the body. I was told before my arrival, that during these paroxysms, his suffering was intense,

so much so that his shrieks could be heard a considerable distance from the house. I ordered turpentine stupes to be applied to the back of his neck and down along the spine; also gave calomel gr. ij., with opium gr. ½, every two hours. His tongue I could not see. The pulse was not so frequent, nor as full as yesterday.

30th.—Patient about as yesterday; bowels moved pretty freely; complains of pain in the epigastric region. I applied the turpentine stupes over the abdomen and continued their use to the spine twice a day. The stupes seemed to afford much temporary relief in abating pain and partially relieving the paroxysms, the latter though have greatly increased in violence and frequency. He has almost entirely lost the use of the voluntary muscles, being unable to turn in bed or even to raise his head the least. Calomel and opium continued as yesterday.

31st.—Patient has great rigidity of the body and strong muscular spasms; lies with his head thrown back; eyes about half open; lips slightly parted, exposing the teeth—producing thus the most unforbidding grin. His legs are strongly flexed on the body and is unable to extend them. He is becoming pretty well narcotized; is perspiring very freely; has great thirst; takes water through a quill inserted behind the last molar tooth, on account of the jaws being so firmly closed. Fresh sweet milk, with ice, is his only food.—Calomel and opii continued. Opium increased ½ gr., making calomel gr. ij., opii gr. j., every two hours. Pulse becoming more feeble.

August 1st.—Bowels moved so frequently that it was thought best to discontinue the calomel. Opium was increased to gr. i ss., every two hours. He had some five or six movements from the bowels during the night, which seemed to exhaust him very much; pulse quite feeble and frequent; skin cool and bathed in a profuse perspiration, with the clammy feeling of death. Spasms still frequent and very severe. Gave him as much toddy as he could take and quinine gr. i. in solution, every two hours. Continued the milk. Other nourishment, as egg-nogg, &c., disagreed with him.

Aug. 2d.—Still great rigidity of the muscles, and frequently severe spasms, with retention of urine. Great restlessness and mental excitement. Patient firmly believes he is dying. Pulse very feeble and pupils much contracted. Skin cool and still bathed

with that clammy perspiration. Has some difficulty in deglutition; fluids would frequently regurgitate; great thirst; quinine and toddy continued. Gave ext. cannabis indica gr. i ss., every two hours, with but little effect; suspended it and gave opii gr. ij., pulv. camphor gr. ij., every two hours, which improved his pulse, increased the warmth of the skin and materially controlled the spasms. I had the patient well rubbed with turpentine liniment, and stupes applied wherever and whenever he complains of pain.

Aug. 3d.—Patient is resting tolerably quietly; is fully narcotized, and keeps up a continual muttering and talking in his sleep; starts and jumps at the slightest sound or sudden noise. When fully awakened is perfectly rational; calls for water or milk; has great thirst. Bowels are now constipated; no movement since 1st. Has urinated, after applying hot, moist cloths over the bladder, though with considerable difficulty. I gave the ext. cannabis again, upon the suggestion of my brother, Dr. Wm. Somerville, in one gr. doses every two hours. It did not control the spasms so well as the camph. and opium. The latter medicines were substituted for it and given as on yesterday. He was ordered ol. turpentine gts. x., every four hours—the necessity of this being indicated by the great thirst and the entire absence of all appearance of moisture about the lips, teeth and gums.

When in a state of great mental excitement, or severe paroxysm of painful spasm, chloroform was given by inhalation until it produced its tolerably full effect. While under the influence of chloroform, his jaws could be easily pressed open, and all the muscles of the body would relax. The tongue then was found to be coated with a dirty white-like fur and very dry and crisp. As soon as the effect of the chloroform passed off, the muscular spasms would return with the same violence as before. Gave toddy and milk every half hour, alternating. Continued the quinine and turpentine. Gave ol. tiglii gtt. 1-4, every four hours, until the bowels were moved.

4th.—Bowels moved twice this morning; general condition about as yesterday; treatment continued.

5th.—Patient extremely ill last night; great mental excitement, such as singing, praying, driving horses, &c. Spasms very severe, bending the body backwards until it described a curve of fully one-

fourth of a circle. They would come on with such violence as to expel the flatus with noise and much force. The abdomen and whole body as rigid and unyielding as wood; masseter muscles powerfully contracted, closing the jaws so firmly the teeth overlapped, I suppose, one-fourth of an inch. He had, I might safely say, one continued spasm for about five hours, during which time he took thirteen grains of opium and the same amount of camphor. Pulse very feeble, so much so that chloroform was given with much hesitation. It, however, was administered cautiously, and finally produced quietude. His sleep then was tolerably calm, with the exception of the nervous twitching, which has been a constant symptom. Quinine and turpentine continued. Ordered the camph. and opium to be taken once every three hours during the day. This kept him tolerably quiet. Gave toddy and broth freely. Ordered the spine and abdomen to be well rubbed with chloroform liniment.

6th.—Rested well last night; skin warmer; pulse better, fuller and stronger and not so frequent; no movement from the bowels. Desires to urinate frequently, but with some difficulty; hot, moist cloths used over the bladder; skin acting freely and appetite good. Treatment continued.

7th.—Symptoms better; spasms not quite so frequent or severe; pulse about as yesterday; bowels not moved; does not suffer as much pain. The jaws relax when sleeping, but close again very tightly at the least effort at speaking or swallowing. Ext. hemp tried again, gr. i. every hour, but did not act well; seemed to increase the nervous excitement, and did not control the spasms.—The pulse, also, while giving the hemp, would become much weakened. Gave then camph. gr. ij., and opium i ss, about every two and a half hours, which kept him tolerably quiet. Turpentine discontinued and gave quinine and tinct. ferri muriat. gtt. x, thrice daily—quinine, in one grain doses, at the same period; also gave good food.

8th.—Patient still improving. It was thought best to increase the opium again to two grains, the better to preserve quietude. The dose was then given once in three hours. Gave one comp. cathartic pill at night; other treatment continued.

9th.—Less rigidity and spasms; can open his mouth slightly by

voluntary effort; also raise his head and move his body and limbs perceptibly. He slept well most of the night; gave this morning castor oil ℥ ss.; bowels moved once. Continued camphor and opium every three hours. Quinine, iron and good food. Toddy, milk, beef tea, soup, &c. He was well rubbed twice each day with chloroform liniment. The latter he always desired being done, as it seemed to give great relief.

10th.—Had a severe attack of colic last night, which was relieved by turpentine stupes over the abdomen, and stimulating injections; is resting well this morning. Tongue cleaning and getting moist. Spasms still less frequent and has more control of the voluntary muscles. Treatment continued.

11th.—Patient quite smart this morning; features becoming more natural; rested well during the night and feels more comfortably. Camphor and opium suspended.

12th.—Patient was quite restless during the night, on which account the camph. and opium were resumed as before. It readily controlled that nervous and restless state. Appetite good; pulse improving and all the secretions in a favourable state.

14th.—Patient doing well, except that he is somewhat restless at night. Takes plenty of good food. Treatment continued.

16th.—Bowels moved twice from the use of oil; has taken no opium or camphor for the past twenty-four hours. Quinine and iron continued; sleeps well.

18th.—Patient still improving; has very feeble spasms once or twice in 24 hours; appetite very good; bowels moved without the aid of medicine. Can move with comparative ease; sleeps well.

19th.—Patient improving finely; is beginning to chew soft bread; complains of a stinging and pricking sensation in various places over the body. Quinine suspended; tinct. iron continued "ter die."

Aug. 28th.—Patient sitting up and walking about the house, entirely convalescent. All medical treatment suspended. The patient took, from July 29th to Aug. 14th, 200 grains of opium and 400 grains of camphor. These two articles I regard as the sheet anchor in his case, though much benefit, I believe, was derived from the inhalation of chloroform, the application of the turpentine stupes and the use of chloroform liniment.

ART. III.—PNEUMONIA. By M. K. STARKE, M. D., Little Rock, Arkansas.

Pneumonia is a grave disease of the chest which has occupied the attention of physicians for many centuries, but it is only within the last few years, its characters have been well understood. I propose now only to notice some of its causes, the influence of climate and season, the different features of the affection, according to age and sex, its history, pathology and treatment.

The treatment of pneumonia, as of other fearful maladies, has been much abused. How numerous are the vaunted remedies, how various the methods of treatment which have been and are to-day recommended.

In Europe and America each hospital claims superiority in its mode of treatment, giving statistics to confirm statements and urging the Profession generally to adopt the treatment which proved most beneficial. The result of these differences of opinion has been that many persons were induced to abstain from all treatment, only observing rigidly the rules of hygiene, and their success has been really astonishing. A medical gentleman of Vienna has reported some one hundred and fifty cases of pneumonia cured without the aid of any medicine.

The disease was known but very imperfectly at an early period. Hippocrates had a vague idea of it, but not being in possession of means for making a clear diagnosis, confounded it with pleuritis. Subsequent ages did not elucidate its characters, and the medical world received and taught the imperfect views of the disease entertained by Hippocrates. Galen added nothing to the description of Hippocrates, indeed his writings on this subject prove to us his utter inability to distinguish pneumonia from pleuritis: his description of pleurisy answers to that of pneumonia—he observed the *rust* colored sputa in both diseases. This alone is evidence to convince us that he did not understand the pathology of pleuritis and could only distinguish the two diseases in exceptional cases. This obscurity in the diagnosis of pneumonia remained until a late date; to the labour of the great Bichat,

medical science is indebted for the first true characters of pneumonia.

Pinel, profitting by the investigations of Bichat, on minute anatomy, made the diagnosis between pneumonia and pleurisy quite well, yet he could not speak as positively on their different characters as we do. It remained for Laennec to mark out the anatomical lesions, and to free the Profession of its errors. By auscultation and percussion, (the only possible way of learning the true condition of the lungs,) Laennec opened a new field of study, and directed the men of his time into a course which would inevitably conduct them to a thorough appreciation of the lesions of the respiratory apparatus. Now, with a moderate degree of attention, every one can easily solve the *once* difficult question—diagnosis between pneumonia and pleuritis.

The received definition of pneumonia is an inflammation of the parenchyma of the lung; there are, however, other affections described under this head, but they should be regarded as complications only. Formerly it was stated that children and old persons escaped attacks of pneumonia; but to see the inacuracy of this assertion, one has only to refer to his own experience. M. Valliex has observed the disease so frequently in new-born children, that he thinks it more common at that age than any other period of life. At the age of two years the disease is exceedingly frequent. This error arose from the want of means to detect diseases of the chest, or from an imperfect interpretation of the signs given by auscultation and percussion. M. Grisolle accounts for the error respecting the frequency of pneumonia in old persons very satisfactorily:—First, there are fewer old men and women than adults; Secondly, that class of patients being very generally sent to hospices, rarely admitted in large hospitals where statistics are made. Excluding new-born children, age does not seem to exert much influence on the frequency of pneumonia; that it occurs about as often with the old as adults, unless we observe extreme old age, where the individuals confined to their rooms, are little exposed to the vicissitudes of temperature and other circumstances which favour the development of pneumonia.

From the extended and careful observations of M. Grisolle, he

draws the following conclusions: The disease is common in infancy, diminishes in frequency to the age of twenty, then augments sensibly, to diminish again at forty, and after sixty is very frequent. The difference of opinion relative to the influence of sex has been quite as great as that concerning age. Females not undergoing the same labours, and not so much exposed to the causes of pneumonia, escape it more often than males. In countries where the sexes have the same occupation, Frank found the disease as often in the female as in the male. Ease and hygienic conditions render man less subject to attacks, and for the same reason, the habits of woman render her less frequently the victim of pneumonia than man.

We cannot determine the influence of Profession, but there are many occupations which are favourable to the production of pneumonia. The baker is probably more frequently attacked than any other person who labours for his living. In large cities, when the ovens are used nightly, the hands are up till morning, when their work being done, they throw themselves upon benches, without covering to sleep. After hours of hard work, and covered with perspiration, they cool off suddenly and remain enveloped in their wet clothes often until night, when they again resume their labours. Persons of weakly constitutions are more often the subjects of pneumonia than the robust. It is very common to see persons who have suffered from typhoid fever, attacked by pneumonia, and the only cause we can assign for it, is the debilitated state in which the fever left the patient. Having had pneumonia once, it appears the patient is more liable to a second attack. It is more prevalent during the Spring months than the Winter; the varying temperature of March and April show us a decided increase in the disease, which also assumes a grave type. Cold is by far the most fruitful agent in the production of pneumonia, especially when prolonged and acting in concert with dampness, and most patients date their sickness from some exposure. External violence is sometimes, though rarely, a cause of the disease, even when such is the case the attacks are generally not severe.

In many instances the inflammation appears to commence abruptly, or sets in without antecedent symptoms, but in the majority

of cases, there are symptoms which warn the person of approaching trouble—such as loss of appetite, unaccustomed weakness, great sensibility to cold, and frequent shiverings. M. Grisolle states that pneumonia comes on in one-fourth of the cases of acute bronchitis, which disease renders persons more susceptible to pulmonary inflammation.

In children at the breast the symptoms of pneumonia are obscure, and we only notice agitation, quick respiration and fever. When once declared, the symptoms are both general and local; pain is generally complained of within the first twelve hours, and if deferred longer than the fourth day, rarely manifests itself. It is sharp and sticking, situated commonly in the region of the mamma, and may or may not correspond to that portion of the lung inflamed. It often radiates to different parts of the chest, and is generally exasperated by cough and full inspiration. This pain is owing to concomitant pleurisy, more than to the inflammation of the lung.—The majority of persons suffer from hurried respiration, and the dyspnœa is often intense, which is not so much in connection with pain, as with the extent of inflammation. These symptoms are more severe in the young, in persons with deformed chest, and in women in advanced pregnancy. Cough is the most common symptom, yet is not so constant in children as in adults. It begins about the first twelve hours, and is in proportion to the extent of the inflammation. It is seldom by fits, as in bronchitis. Causes the expulsion of a peculiar expectoration, altogether characteristic of the disease, consisting of a viscous fluid adhering to the vase and with difficulty displaced from it. It is sometimes transparent, and mixed with bubbles of air or presents a reddish coloration resembling brick dust. Often the expectoration is yellowish, having the appearance of gum acacia in solution, or of a greenish cast, and when in the third stage of the inflammation, it resembles prune juice or liquorice water.

The expectoration is observed the first two days and is truly pathognomic; its absence, however, does not argue against the existence of pneumonia, for we frequently meet with cases without any expectoration, and by auscultation and percussion we are perfectly sure of the disease. In very young children the expec-

toration is generally absent. M. Valliex has observed a whitish froth, slightly tinged with blood, escaping from the child's mouth upon crying, and he considers this blood-stained foam as an evidence of pneumonia. Ramek, of Berlin, has paid great attention to the examination of the expectoration, and in a number of cases found small branched concretions, which had been thrown off from the bronchial tubes, evidence of a certain amount of bronchitis.

The most important and trustworthy information is gained by auscultation and percussion. During the first seventy hours, percussion teaches us very little of the changes going on in the chest, but after this time the lung becomes less permeable, gradually takes its sonorousness, which though slight is evident when compared with the unaffected side. There is also a sensible difference between the elasticity of the thoracic walls of the two sides. Percuss the sound side; the percussing finger rebounds immediately and the finger used as a pleximeter scarcely feels the percussions; on the diseased side the fingers do not rebound, and though the percussion be light, the blow is felt sensibly by the finger used as a pleximeter. This want of elasticity is always observed and is of much importance in diagnosis.

Percussion should be practised with force sufficient to elicit sound from some considerable depth, for if the consolidated tissue be separated from the surface by a healthy portion of lung, light percussion would give us a sound, whereas, if properly percussed, the dullness would be plain. In lobular pneumonia, auscultation is principally relied upon, there being only a few lobules affected, and they being deep-seated, percussion gives no abnormal sound.

The three stages of pneumonia, which were first described by Laennec are yet retained, not only for convenience, but for the treatment, which is essentially different in each period.

In the first stage, or that of congestion, if the patient is seen early, there is, according to Mr. Grisolle, a diminution of the respiratory murmur, and Mr. Stokes has often noticed *puerile* respiration. After the lapse of twelve hours, these signs are replaced by the crepitant rale, formed by the bursting of fine dry bubbles of air of same size, resembling the crackling of salt when thrown on hot coals. But M. Beau states it is owing to the suspension of the aqueous exhala-

tion from the bronchial membrane, which leaves the mucous in such a tenacious condition, that the bronchial membrane is glued together and kept so partly by the ribs, the action of the diaphragm during expiration, together with the capillary congestion and interstitial effusion, and that the air rushing in during inspiration overcomes these cohesions, producing the crepitant rale. But Dr. Stillé remarks, that it is difficult to see how such a process could generate sound, where no air exists, and that as the crepitant soon emerges into the sub-crepitant, he was willing to adopt the opinion of Dr. Carr and Prof. Mitchell, that the crepitant rale is formed in the vesicles themselves; this rale is heard during inspiration only, and is very like that heard at the base of the lung posteriorly, after protracted illness; but if closely examined, it is larger and more moist than the crepitant rale. The crepitant rale is heard during the whole of inspiration ordinarily—sometimes heard only towards the end of inspiration when very full. There are some patients who breath badly—hold their breath or take slow and gentle inspirations, so that the crepitus is not produced. When this is the case the patient should be made to cough, and the crepitus is abundant during the full inspiration which produces that act. This rale marks the first stage of pneumonia and is never absent.

The second stage or ramollisement rouge: The disease seldom, if ever, disappears before reaching this degree, whatever may have been the remedies directed against it. By percussion there is a dull sound over the affected portion, with loss of elasticity in the thoracic walls. On auscultating the lung, the crepitus is no longer heard, but in its place a "rude bruit," or blowing, such as would be produced by blowing into a metallic tube, and is directed immediately into the ear. This is bronchial respiration, caused by the resonance of air in the large tubes, while the small tubes are impermeable.—Dr. Jackson, of Boston, was the first to observe that bronchial respiration commenced during expiration and continued some hours before it is established in inspiration. The transition of crepitus into bronchial souffle is gradual, and, according to M. Grisolle, between the crepitus and souffle there is a "bruit de taffetas" heard in inspiration and very distinct during cough; it is more frequently found in the axilla and indicates superficial consolidation.

When the patient speaks, the voice is transmitted through the thoracic walls to the ear, with clearness, having a metallic type. This is bronchophony, and if well marked, the vocal vibrations are exceedingly distinct, and felt by applying the hand on the chest. Dullness, bronchial respiration, bronchophony and vibration of the voice, assure us of the hepatized condition of the lung. As these changes are taking place in the respiratory organs, other parts of the economy are sympathizing with them. The pulse becomes quicker, increases in fullness and resistance. The heart ought never to be neglected; its examination should be careful and repeated at short intervals, for pericarditis is often a complication of pneumonia and may escape our notice. I have seen several such cases, and the patient not calling attention to the heart, the complication was not discovered until the post mortem examination.

I have the notes of a case before me. The patient had a severe attack of pneumonia, but not complaining of pain in the cardiac region or presenting any symptoms of pericarditis, this organ was not examined. The patient died, and the autopsy revealed coëxistant with pneumonia intense pericarditis, the pericardium containing more than six ounces of reddish serum. I have also another case admitted into the Va. Hospital. The patient was delirious, with a brown, dry tongue, hot and dry skin, pulse over one hundred and forty-six a minute, irregular and intermittent, troublesome cough and considerable dyspnœa. On applying my ear to the chest, I found he had pneumonia, involving both lungs, but more especially the left, in which there was no vesicular murmur, no crepitus, but a "rude bruit" or blowing, broncophony and vibration of voice. Percussion elicited flatness, both anteriorly and posteriorly, with loss of elasticity: on the right side I found considerable dullness, though some elasticity, while the crepitant rale seemed to pervade the almost entire lung. On examining the heart I found not only *pericarditis*, but auriculo-ventricular stricture or insufficiency, a blowing sound with the first sound of the heart, with the maximum at the base.

I requested Dr. Pottenger, then in charge, and my friend, Dr. F. Peyre Porcher, to see him with me. It was determined to use the veratrum with alterative doses of mercury, and anodyne at night;

blister 10x12 applied to the anterior portion of the chest; flax seed tea, with small quantity chlo. potass. dissolved in it, to allay thirst; after taking the fourth dose, the pulse was reduced to about eighty, when the veratrum was discontinued, and only given at times, when required to control the action of the heart. In a short time the delirium subsided, the skin lost that peculiar hot pungent feel, when it was thought advisable to combine with the mercury, quinine and pulv. ipecac. The patient recovered and left the hospital several weeks afterwards, carrying with him organic disease of the heart. Whether he had this latter disease prior to the attack of pneumonia or not, I was unable to determine.

The digestive organs are also commonly deranged, the tongue white, loss of appetite, occasionally vomiting, great thirst, and in young persons diarrhœa is not unusual; fever generally increases in the evening, rendering the patient *restless* and *unable to sleep*.—M. Grisolle, in half the cases, found the urine diminished in quantity, acid, and depositing spontaneously or by the addition of nitric acid, an abundance of urate of ammonia, this deposit occurring as the inflammation declines, and was *not found* in cases which terminated fatally. Violent headache is one of the first symptoms and continues until the seventh or eight day. It increases in the *evening* with the rise of the fever; the strength fails much, but the exhaustion is less in pneumonia than in any other grave disease.

The disease is not confined to the parts first invaded, but tends rapidly to spread over the surrounding tissue. Auscultation and percussion gives us very exactly the progress of the disease, unless it is very deep seated; but in most cases inflammation commences on the surface of the lung, and we can note accurately its march. Double pneumonia probably never occurs as a primitive disease; one lung is affected sometime before the other, and the disease is not observed on the opposite side, because it is rare to find new symptoms developed, or anything to awaken suspicion. With infants and old persons, the stethoscopic phenomena change in a singular manner, and the physician forgetting this, may be often disappointed. At one examination the bronchial souffle may be distinct, but in the course of four or five hours, it will disappear and be replaced by the vesicular murmur.

In such instances, the actual condition of the patient remains the same, and the souffle returns in a few hours. If the patient is to recover, the symptoms change quite rapidly. Pain abates, pulse and heat decline, cough is easier, expectoration losing its rust colour, becomes white and is more aerated; pains disappear and the patient sleeps, bronchial respiration grows feeble, inspiration is natural, but expiration retains the bronchial souffle in some degree.—The subcrepitant rale is first heard in that part of the lung last invaded, and extends towards the centre of the inflamed tissue, or those parts first attacked. The signs do not disappear for many days after the patient ceases to complain. When the disease is to end fatally, the symptoms are aggravated, except pain which is not troublesome. Respiration is quicker, and more difficult, prostration extreme, hardly force enough to expectorate. Sputa small in quantity, dirty grayish colour or like prune juice, sometimes purulent, and with the bronchial respiration there is a large mucous rale often abundant, the face is livid, skin covered with viscous sweat; pulse weak, frequent, and irregular; the extremities become cold, and death is not long in carrying off the patient.

The symptoms of the second and third stages are much the same. By physical signs we cannot distinguish them. We suspect the third stage when the strength fails completely, pulse very quick and irregular, expectoration purulent or like prune juice, &c. The disease reaching this degree is always fatal; the lesions are too extensive to be repaired, besides suppuration lowers the vital powers beyond an attempt at cure.

It is uncommon for the disease to pass into a chronic state. M. Grisolle has only seen one such case. He says the lung *may* return to health, but the disposition of tubercles more frequently occurs. It sometimes terminates in gangrene, and is known by a blackish brown expectoration, offensive in the extreme.

One of the most usual complications is bronchitis, which is recognised by sibilant and sonorant rales in both lungs, mucous expectoration mixed with the rust coloured sputa. Pleurisy is seldom absent and is the cause of the sharp pains, as pneumonia *per se* is painless. If there is effusion, the diagnosis may be difficult in a great measure, but the obstacle may be overcome in a measure

by placing the patient in different positions and thus allowing the fluid to change place, when percussion and auscultation are practiced on the part where the fluid has left. Pericarditis should be suspected in every case, not that it is so frequent, but because of the gravity of pneumonia when complicated with it. Delirium is common when the fever is high, males more subject to it than females, both sexes more liable to it after forty years of age, is unusual in children, unless the pneumonia is double, or has taken the typhod form.

The different forms of pneumonia which have been described are more interesting than important, and I shall not, for this reason, speak of them. The pathological condition of the lung, in the first degree, or simple congestion, is of a livid colour, and its weight is much increased. Its elasticity, though impaired, is marked—its crepitation is sensibly diminished. If the lung is incised, there flows from the incision a frothy serous fluid, more or less bloody. If a portion of the lung is thrown in water, it floats, showing that the tissue was permeable and retains air to prevent its sinking. In the second degree, there is a striking resemblance between the lung and liver, and is often called red hepatization; it is increased in volume; has lost its crepitation; is hard and perfectly impermeable; sinking immediately when thrown in water; externally it is of a red appearance; if cut, the incision has a marked aspect, and there escapes a small quantity of reddish necreated fluid. If the altered tissues are torn, instead of being cut, there are seen numerous little red granulations, hard and spherical, which are the pulmonary vesicles with thickened walls, or entire obliteration of the cavities. M. Valliex has not seen this granular condition of the lung in children; but MM. Barthez and Rilliet affirm the contrary, and think M. Valliex has always incised, instead of tearing the lung. Sometimes the lung is red, hard and not granular—almost homogeneous, when the term carnification is applied to it, or splenization when the tissue is soft, slightly granular, and impermeable, resembling the spleen. In the third degree, the volume of the lung is the same as in the second. The granular appearance is also noticed in some parts; its colour is grayish or straw yellow; is friable, and is reduced by pressure into a grayish, pulpy mass, consisting of pus and debris of pulmonary tissue. The pus, at first infiltrated through the lung,

sooner or later forms abscesses. These abscesses are generally situated near the surface, and at these points the plura is often thin and soft; the cavities of the abscess have irregular walls of hardened tissue, infiltrated with pus. Sometimes the walls are gangrenous. These abscesses do not often communicate with the bronchial tubes, the patient not living long enough for such to take place.

In the treatment of pneumonia, as of all other diseases, I know of no remedy, or set of remedies, universally applicable, and to prescribe successfully we must mark well the particular stage of the disease; the amount and extent of tissue involved; the age, sex, habits and diathesis of the patient; the complications and idiosyncracies, if any. These facts, together with a strict observance of the rules of hygiene, will scarcely allow the Physician to materially err in meeting the indications and successfully combating the disease.

ART. IV.—ATROPHY OF THE RETINA. (From the French of M. Le Docteur Desmarras.) By WM. MASON TURNER, B. Ph., M. D., Philadelphia.

This affection is in constant connexion with atrophy of the papilla of the optic nerve. It is recognized chiefly by the absence or by the diminution of the number, and in the volume of those vessels of which we have already spoken in a preceding article; it appears to me to be the result of an affection bearing on the optic nerve, or even more remote still. The papilla is generally prominent and nacreous (shining like pearl), brilliant, of an unusual lustre; plainly arched as the top of a mushroom, and somewhat smaller in its diameters, than when in its normal condition. The delicate and subtile vessels which escape, are curved and bent on account of the surface on which they repose; in some instances they appear the same as those we see (especially) in glaucoma, which hide themselves under the edge of the papilla, but to reappear a little further under the same border. The delicate vessels are soon lost and it is very rare in advanced cases, that one or two can be traced as far as the *ora serrata*.

By the means, however, of a delicate opthalmoscope, we can

recognise the nature and symptoms of the affection, on which all agree, and of which it is not necessary here to give a description.

Atrophy of the retina is quite often observed as a sequel in chronic choroido-retinitis. The bottom of the eye presents, in these cases, derangements common to choroiditis and to retinitis—that is to say, piling up of the pigmentum, the white choroidal plates, exudations more or less extensive, and disposed, these in the retina, which it sometimes replaces, the others on the choroid membrane, etc.

Atrophy of the retina shows itself in different degrees. The patient, at first, experiences a difficulty in reading and in seeing distant objects. Sometimes he remains in this state for only a short time. Sometimes also he loses his sight gradually. In the commencement he should use very powerful convex glasses.

The treatment of this affection should be directed against the causes of compression of the optic nerve. We must search diligently into the history of the case, and we will indeed be fortunate if we can find a *venereal* cause, which allows us to apply a specific treatment, under which an exostosis can be made to disappear.—When the contrary is the case, we should study the different cerebral affections, which can have, as an effect, compression of the optic nerve, and we must combat that affection when determined.—Of course, generally speaking, alteratives are indicated.

[I have used the word *papilla* in the translation because we have none better in English. Papilla is a name given to a slight eminence which forms the optic nerve on the anterior face of the retina on a level with its entrance (that of the optic nerve) into the cavity of the sclerotica.—*Translator.*]

ECLECTIC DEPARTMENT.

"Floriferis ut Apes in Saltibus Omnia Limant."—LUCRET.

I.—THE PATHOLOGY AND TREATMENT OF ORGANIC INFANTILE PARALYSIS. By WILLIAM A. HAMMOND, M. D., &c.

The form of paralysis occurring in young children, and which I design considering in this memoir, is that which Rilliet and Barthez* have

* Traite Clinique et pratique des Maladies de l'Enfance. Paris, 1853, t. II, p. 335.

described as the *Paralysie essentielle de l'enfance*, and to which Duchenne* has given the name of *Paralysie atrophique graisseuse de l'enfance*. Previous to the writings of these authors, the affection in question was not distinctly recognized as a separate disease, but was confounded with a much less serious disorder. Thus Dr. West† described it tolerably well in a paper on the paralysis of infants, but regarded it as a variety of a disease which appeared under two other forms, one of which was congenital, and the other of cerebral origin. Both the latter, were not, in his opinion, of any serious character. The other, which was much more severe, occurred generally in debilitated children, and without exhibiting symptoms of any disorder of the brain. Recovery was often only partial, and though the general health sometimes became robust, the affected limb remained powerless and wasted away.

Dr. Kennedy‡ wrote two very excellent memoirs on a form of temporary paralysis, to which he had observed children to be liable. This came on very suddenly and disappeared in a few days under appropriate treatment.

Dr. Handfield Jones§ has recently related the details of several cases of this temporary paralysis, and a number of similar ones have been under my own charge. All recovered under the use of strychnia and iron, combined with mild faradaic currents applied to the affected limbs.

Duchenne, in the work to which reference has been made, described the affection, now under notice, with much minuteness, both as regards its symptoms and pathology. As the name he gives it indicates, he considers it to consist essentially in atrophy of the muscles, attended with fatty degeneration. That this latter is almost always the condition of the muscles, I am very sure; at the same time, my experience leads me to the conclusion that the conversion of the muscular tissue into fat is not a necessary accompaniment. Not long since, I related‖ the details of several cases of this disease, and stated that I was disposed to regard it as an affection in which the muscles became atrophied and lose their irritability without necessarily undergoing fatty degeneration. Further experience has confirmed me in this opinion. As a rule, however, there is no doubt of the correctness of Duchenne's view in relation to the pathology of the disease.

According to this author, the principal phenomena which characterize what I have designated organic infantile paralysis, are paralysis, atrophy, and in some muscles a more profound lesion—fatty degeneration, or substitution. The fact that Duchenne himself thus admits

* De l' Electisation localisee, etc. Paris, 1861, p. 275.

† Medical Gazette, Sept. 8th, 1843.

‡ "Dublin Medical Press," Sept. 29, 1841, and "Dublin Quarterly Journal of Medicine," February, 1850.

§ Clinical Observations on Functional Nervous Disorders. Am. edition, 1867, p. 92.

‖ On the Treatment of a Certain Form of Paralysis Occurring in Children, NEW YORK MEDICAL JOURNAL, December, 1865, p. 168.

that this last condition is not invariable, is a serious objection, even if there were no others, to the term which he has applied to the disease. Its length and the difficulty of rendering it into ordinary English, have aided in inducing me to propose the name which stands at the head of this article.

Organic infantile paralysis is generally preceded by febrile excitement and pain in the back. This pain marks the seat of the disease of the spinal cord, to which the paralysis of the muscles is due. What the exact character of this spinal affection may be, cannot generally be determined. In one instance, when I had the opportunity of making a post mortem examination and of inspecting the condition of the cord, I found a cicatrix partially filled with a very small clot. The paralysis in this case was situated in the left lower extremity, and had begun four years previously. The lesion existed in the lower part of the dorsal region, in the left anterior column.

In some cases, doubtless, the membranes of the cord, only, are affected, and the condition may be one of simple congestion or of inflammation, which generally appears in a chronic form. In others the substance of the cord is diseased. When the disease of the cord or its membranes, wholly or in part disappears, so long a time has generally elapsed, that the contractile power of the muscles is lost, atrophy has begun, and fatty substitution is often going on. The affection is then entirely muscular. The nerves are not apparently impaired in the integrity of their functions; sensibility is not materially, if at all, lessened. There is simply mal-nutrition of the muscles, not due to any inability of the nerves to transmit impressions, but to the fact, that from central disease, the proper stimulus has not been sent through the nerves of the affected parts to the muscles, for so long a time, that the latter, having lost the power of being excited by their natural motor influence, are incapable of recovering their tone and healthy condition.

Very early in the course of the disease, the electric contractility of the affected muscles is abolished. When the poles of an induction coil are applied to a healthy muscle, contractions are produced. But, very soon after the appearance of organic infantile paralysis, this faculty begins to fade, and in the course of a few months is altogether lost in some of the muscles—not in all, for it generally happens that some one or more can be excited to contractions by strong induced currents. The power of the will is always lost over those muscles in which the electric contractility has disappeared.

Atrophy takes place on account of deficient nutrition, in consequence of the original spinal disease. A less amount of blood flows through the muscles of the affected limb than through those of a corresponding member which may be healthy. The muscles gradually waste away to mere cords of cellular tissue; the muscular tissue is absorbed, or, as is generally the case, is replaced by fat.

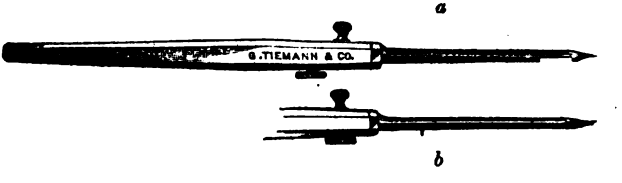
Along with these changes, there is always a reduction of temperature in the affected parts. This sometimes amounts to as much as eight or ten degrees, though generally it is not more than five. If, under the use of appropriate means, improvement takes place, the first indication

is shown by the return of the temperature towards the natural standard. It thus becomes important to have some means by which a very slight increase of heat may be noticed. For this purpose I use Becquerel's discs, which are placed in communication with a galvanometer. These discs consist of a very thin plate of copper about the size of a half dime, soldered to a thin rod of bismuth. This latter is contained in a small tube of hard rubber, furnished with a handle. The discs are two in number. One is placed on the sound limb, and the other on the corresponding part of the paralyzed limb. Both are in connection by delicate silk covered wires with the poles of a galvanometer. If the temperature of both limbs be the same, the needle of the galvanometer remains quiet, if either be warmer than the other, the needle is deflected to the north or south, according as one or the other limb has the higher temperature. By this apparatus, very much less than the hundreth of a degree of temperature can be determined with absolute certainty.

It is also exceedingly important to ascertain the condition of the muscles as to fatty degeneration. For if this process has advanced to any considerable extent, the difficulty of effecting a restoration is much increased. No means of arriving at a correct conclusion, in regard to this point, is at all comparable to a microscopical examination of the suspected tissue. Duchenne has devised a small trocar, which admirably answers the purpose of extracting a minute portion of the muscle without causing any more pain or disturbance than that induced by the prick of a needle.

The instrument is shown in figure 1. It is introduced open, as at *a*.

FIG. 1.



When it is well in, the small button, at the under part of the handle, is pushed forward. This propels a half cylinder of steel against the shoulder, at the end of the trocar, and thus a small piece of the muscle is detached and caught in the cavity. The lower figure *b* represents the instrument ready to be withdrawn. By drawing the button back, the bit of fibre can be taken out, and is then ready for microscopical examination.

The muscles of a part affected with organic infantile paralysis, are very interesting subjects for study, and their examination should not be neglected in any case of the disease where there is hope of being able to effect a cure. Indeed, without this examination it is often impossible to give any definite opinion upon the subject. If the muscles are, to a very great extent, replaced by fat, it will be almost impossible to bring about a cure; if, on the contrary, such substitution has not

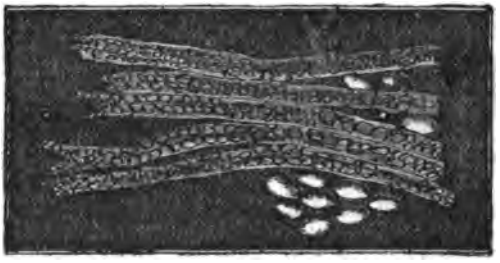
taken place, or if it has only progressed to a comparatively slight extent, a cure may be safely promised. The absence of electric contractility will not determine the point, for this disappears long before the change begins in the muscle. Occasionally, as I shall show hereafter, the muscular fibre preserves its state of histological integrity.

The progressive character of the morbid process is well shown in the accompanying cuts. Figure 2 represents a portion of the upper part of the tibialis anticus muscle of a boy who had suffered from organic infantile paralysis for over two years. Oil-globules are seen along the course of the fibrillæ, these latter are irregular and torn, and the transverse striæ are becoming dim.

FIG. 2.

In figure 3, a still more advanced stage is shown. This cut represents a portion of the same muscle taken from the lower part. The transverse striæ have nearly disappeared, oil-globules are seen in large numbers, and fat-corpuscles are also abundant.

FIG. 3.



In figure 4, the progress of the disease is well shown. The lower margin of the specimen is a mass of fat-globules, and throughout the whole, the transverse striæ are absent.

FIG. 4.

In figure 5, a portion taken from the same muscle one month after the preceding specimens were removed, is shown. The transverse striæ are entirely gone, and the muscle is a mass of oil-globules and fat-vesicles.

FIG. 5.

Figure 6. represents a piece of the same muscle six weeks later. It is now nothing more than a mass of connective tissue, the fat being almost entirely absorbed, no transverse or longitudinal striæ are to be perceived.

FIG. 6.

But as I said, there is not this necessary degeneration in every case of organic infantile paralysis. In two cases, which had lasted over four years, and which were clearly due to spinal disease, I found the

structure of the muscle unchanged. There were atrophy, loss of electric contractility, and reduction of temperature; but every specimen of the affected muscles that I examined showed no change from the normal character. In every other respect, the symptoms were similar to those observed in ordinary cases of the disease. Improvement was very slow, but finally every muscle, except the rectus femoris, in one, and the tibialis anticus of the other, recovered, and the children were enabled to walk. The affection in both cases was confined to the left lower extremity.

I am hence led to the conclusion that fatty degeneration, though the ordinary result of organic infantile paralysis, is not an invariable consequence.

The treatment of the disease consists in the use of general and local means. Of these, the latter are of much the greater importance, especially after the spinal affection has in a manner subsided, and the disease is chiefly manifested in the paralyzed condition of certain muscles.

During the acute stage, there is nothing of so much efficiency as rest in bed. I know of no medicines which are capable of producing any specific action on the spinal cord at this time, and even after the spinal affection has become more chronic, the means mainly to be relied upon are those which are applicable to the local trouble of the muscles. It is to these, therefore, that I shall particularly ask attention.

Strychnia is useful, because it is capable of acting as a general stimulant to the nervous system, and is, moreover, a tonic to the muscles. I generally prescribe it in union with iron and phosphoric acid, according to the following formula: R. strychnia, grs. 1; ferri pyrophosphatis 1-2 dr. acidi phosphorici diluti 1-2 oz., syrupus zingiberis 3 1-2. ozs. M. ft. mist.

Of this a teaspoonful may be given three times a day to a child of four years old or over; half the quantity will be enough for a younger child.

The immediately local means of treatment are those which are calculated to promote the nutrition of the muscles, and restore or augment their contractile power. The first end is to be obtained by causing a greater amount of blood to flow through the diseased parts. The second is best effected by the persistent use of electricity and active and passive exercise.

Under the first head are embraced heat, frictions, and kneading.

Heat is best applied by means of hot water. A temperature of from 110° to 135° may be used and the limb should be thoroughly immersed and allowed to remain so for half an hour; salt may be added to the water, with the view of augmenting the stimulant effect. I think heat thus applied is more efficacious than when it is used dry. The pores of the skin are more thoroughly opened and the tissues softened.

Frictions with a dry towel, a flesh-brush, or the hand, are also exceedingly useful. They should be practised several times in the course of the day, to the extent of reddening the skin.

Kneading the muscles affords a means of exercising them, and of

increasing the amount of blood in the vessels. They should be pinched firmly between the fingers of both hands to the extent of producing some little pain. Under this operation, they often lose their flabbiness and become firm and hard. Half an hour, morning and evening, should be employed in this way. Under the second head are embraced the more effectual measures for restoring the diseased muscles to their normal condition, and electricity ranks first among them.

As generally used in this country, little or no benefit attends the use of this agent. It is either applied in too weak a form, or it is employed in a manner not at all calculated to do service. I have seen the current from an induction apparatus passed through the body of the operator and brought to the affected limb by his fingers being lightly passed over the skin, and I have also witnessed what is called, "galvanizing" the patient, performed by the poles of the machine being held in the hands. When the agent in question is to be used, the current should be applied in such a manner as to localize it in the affected muscles, after the manner so thoroughly elucidated by Duchenne. This requires an accurate knowledge of the anatomy of the parts concerned.

Wet sponges are to be fastened to the electrodes, the skin is to be well moistened, and the contact of the sponges with the skin is to be made over the points of origin and insertion of the paralyzed muscles, each being taken up in turn. In this way the current is made to pass through the diseased parts more effectually than it would otherwise do. To perform the operation with the necessary completeness, if an extremity is paralyzed, at least an hour is required for each *seance*, two or three times a week. When I employ the induced or faradaic current, I make use, generally, of a machine which consists of Farmer's thermo-electric pile as the generator of the electricity, and Kidder's induction coil. I know of no other induction apparatus which is so convenient and so effectual as this. It is only necessary to attach it by a flexible tube to a gas burner, and to turn on the gas and light it. In a few seconds the current is in sufficient quantity and intensity to set the vibrating part in action, and by drawing out the cylinder in the end of the box, the power may be increased to any requisite extent.

But there are many cases of organic infantile paralysis in which the induced current fails altogether to cause the slightest contraction of the muscles, no matter what degree of power is employed. That these cases are not those in which the muscular tissue is entirely converted into fat, is very evident, both from microscopical examination and from the effects of the constant galvanic current in causing motion.

Before the introduction of the faradaic current into practice, the direct current was used with success by Humboldt, Aldini, Majendie, Nysten and many others, and even after the discovery of the principle of induction, it was preferred by some practitioners. In this country Dr. Dewees* of this city insisted upon its advantages.

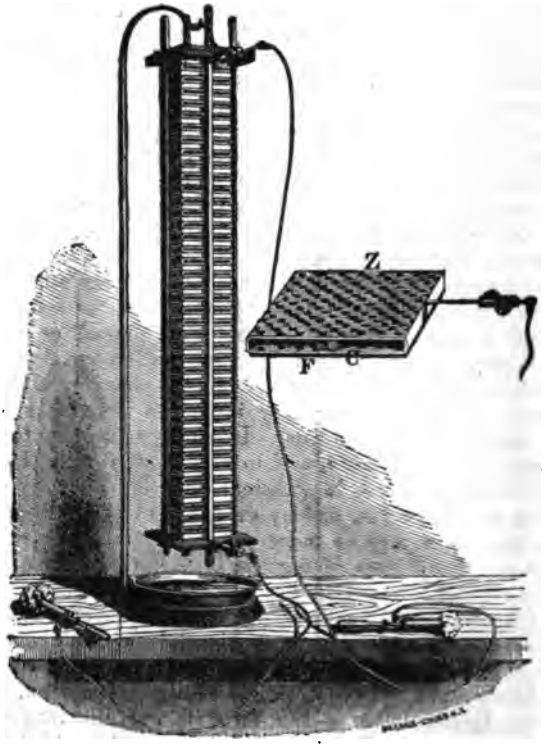
Remak long contended for the superiority of the direct galvanic current over the induced or faradaic, but Duchenne, on the other hand, was equally strenuous for the latter, and appears, so far as England,

* New York Journal of Medicine, May and July, 1847.

France, and this country are concerned, to have carried a majority of the profession with him.

In the New York Medical Journal, for November 1865, I gave the details of three cases of organic infantile paralysis, in which the direct current had excited contractions when the induced current entirely failed to produce this result. I then briefly described the instrument I had devised for the purpose. As many inquiries have been made, with regard to this apparatus, I subjoin a figure which represents it accurately.

FIG. 7.



It consists of a series of elements formed of plates of perforated zinc and copper, as shown at F. These plates are soldered together, the copper being bent over at the ends, the zinc laid upon it, and the two securely fastened. A thin piece of wood is then placed between the plates to prevent their being pressed together. The elements rest upon a plate of hard rubber, and are kept in place by four hard rubber rods. Two other plates of hard rubber, having each a large hole in the centre and four holes for the rods, rest on top. These are kept in place

by pins which pass through holes in the rods. The whole is hung to an iron or brass support, as shown in the figure, and a saucer underneath catches the vinegar used to set the instrument in action.

To arrange the apparatus, an element with a copper wire soldered to the copper plate, is placed upon the lower piece of hard rubber; upon the element, a piece of flannel, or woolen cloth the same size as the element, is placed; upon this another element, then a piece of flannel, and so on. The elements are so placed that the copper is always below. The last element has a piece of copper wire soldered to the zinc plate. Insulated wires are used to connect the poles with the electrodes.

To set the apparatus in action, strong vinegar is poured upon the top. It passes through the elements and moistens the flannel. If the plates were not perforated, the flannel would only be moistened at the edges, and thus a great loss of power would be the result.

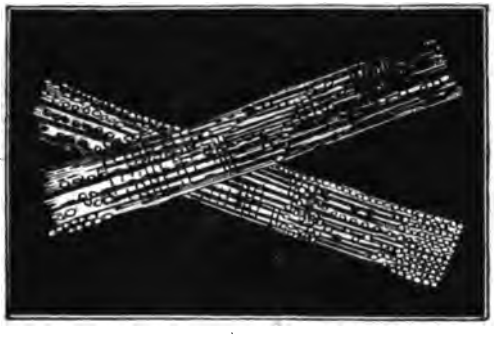
Copper gauze may be used instead of perforated copper plates.*

To use the instrument, the electrodes having wet sponges fastened to them, are placed on the skin over the affected muscle. As soon as contact is made, a contraction of the muscle takes place. Where the current is broken, contraction again occurs. The connection should be made and broken as rapidly as possible, for contraction does not take place if the currents be continued without interruption. I have a little mechanism working by another battery, which makes and breaks the connection with great rapidity.

I have never, in the course of twenty-two cases of organic infantile paralysis treated in this way, found one instance in which this instrument failed to make muscles contract, which would not do so upon the application of the strongest induced current. That it acts, even upon cases in which fatty degeneration is progressing, is shown in the following cuts.

Figure 8 shows the appearance of a portion of muscle as examined by the microscope, October 21st, 1866.

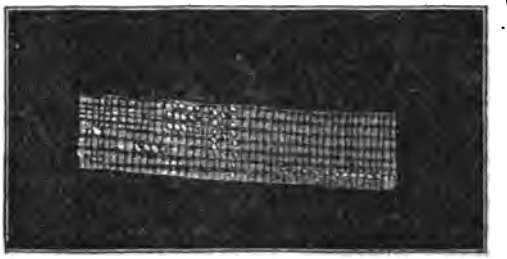
FIG. 5.



* Messrs. Chester, the eminent electrical instrument makers, 104 Centre Street, New York, manufacture my batteries.

Figure 9, represents a piece of the same muscle from the same part in December 3d, six weeks after treatment. In the first, oil-globules are seen to have displaced the muscular tissue to a great extent; the transverse striæ have disappeared entirely from some parts, and are faintly seen even where they are present. In the second, the quantity of fat is perceived to be very much lessened, and the striæ are much more numerous and distinct. This case, which was one of paralysis of the left leg and foot, entirely recovered.

FIG. 9.



After the power of the will is to some extent restored over the muscles, the induced current may be used with more advantage than the direct.

The intensity of the current, generated by the instrument I have described, is very great. It should not, therefore, be applied to any part of the body to which the fifth pair of nerves is distributed, as the retina may be injuriously excited and even blindness be produced. The induced current has no such effect.*

Along with the galvanism, passive motions of the joints should be made, and the child should be encouraged to direct the will to the affected muscles as often and as powerfully as possible.

In a subsequent paper I propose to relate the details of the cases of organic infantile paralysis which have come under my notice.—*Quar. Jour. Psycho. Med.*

II.—HISTORICAL SUMMARY OF AMPUTATIONS AT THE HIP JOINT.

By GEORGE A. OTIS, Assist. Surgeon and Brevt. Lt. Col. U. S. Army, Curator of Army Medical Museum.

Sauveur Francois Morand, who studied surgery in England in 1729, under the celebrated Cheselden, and subsequently became surgeon of

* In a note to the Lecture on Facial Paralysis in the English translation of Trousseau's *Clinique Medicale*, Dr. Bazire states that this power of the direct galvanic current to excite muscular contractions, when the induced current fails to do so, was noticed in Germany in 1864. Dr. Bazire quotes my cases, already alluded to, and states that Mr. Radcliffe and himself have observed the fact to which I have drawn attention.

the Hotel des Invalides, and a Professor at the Parisian hospital of La Charité, was the first practitioner who directed his attention in a particular manner to amputations at the coxo-femoral articulation and proclaimed the practicability of this formidable operation. He studied different methods for this disarticulation upon the cadaver, and reported instances of its successful performance upon dogs and cats; and learned societies and academies were compelled by his great authority to consider the subject.

In March, 1739, two of Morand's pupils—Volher, surgeon to the horse-guards of the King of Denmark, and Puthod, a practitioner at Nyon, in Switzerland—communicated memoirs to the Royal Academy of Surgery at Paris, in which the propriety of this operation was formally advocated, and the various injuries and diseases for which it might be regarded as the only resource were pointed out. These papers were written with much ability, and they were subsequently published by Morand in his works. MM. Le Dran and Guèrin were appointed by the Academy to consider those memoirs, and, after many dissections and long investigations, they made, July 26, 1740, a favourable report.

In 1743, Ravaton desired to perform the operation in the case of a gendarme of Louis XV, with a complicated fracture through the trochanters, but was prevented by the opposition of his colleagues.

In 1748, Lalouette published a thesis strongly recommending a trial of the operation, and the same year, Lacroix, of Orleans, completed an amputation which nature had nearly effected, in the case of a child of fourteen with sphacelus of the lower extremities induced by ergotism. Lacroix, in the presence of Le Blanc, divided with scissors the round ligament and sciatic nerve and shreds of tissue that connected the left thigh with the trunk; and four days afterwards he repeated this procedure and disarticulated the right femur. The boy survived the second operation eleven days. Many writers, among others Mr. W. Sands Cox and Dr. Stephen Smith, cite this case as the first recorded example of amputation at the hip-joint on the living human subject; but it assuredly cannot justly be considered an operation of amputation.

In 1756, Morand succeeded in having this subject made the prize question for that year by the Academy of Surgery; but the twelve memoirs presented were adjudged unsatisfactory, and the subject was again proposed in 1759, when thirty-four essays were offered, and the academy appears to have given its sanction to the proposal by according the prize to the essay of Barbet.

With eighteen others of the essayists, Barbet defended the propriety of amputating at the hip-joint under certain conditions, and he specified some of the circumstances under which he considered the operation justifiable. Thus, if the thigh was crushed by a cannon ball in the neighbourhood of the joint, and only a small portion of the soft tissues remained to be divided by the knife, or if gangrene involved the circumference of the joint and had destroyed the greater portion of the flesh, he thought the disarticulation should be undertaken; and he dwelt very much on Lacroix's case as an illustration. He gave general rules

for the performance of the operation, but wisely observed that the particular plan must be varied according to the nature of the cases in which it was required.

In 1758, Goursaud, surgeon to the College of Paris, proposed a new operative procedure for amputation at the hip-joint. The following year Moublet, surgeon of the hospital at Tarascon, in Provence, published a good essay in advocacy of the operation. Shortly afterwards Puy, of the Hotel-Dieu of Lyons, and Lecompte, announced the successful results of their disarticulations of the femur in the lower animals, and Lefebure published an essay in which the operation was considered in all its relations, and first suggested the propriety of the ligation of the femoral artery as a preliminary step.

On the other side, Callisen, Richerand, Bilguer, and Pott, condemned the operation.

In 1773, Perault, a surgeon at Sainte-Maure, in the department of Indre-et-Loire, imitated Lacroix, in the case of a man twenty-one years of age, named Gois, whose right thigh was crushed between the pole of a wagon and a wall and was almost totally disorganized by the progress of gangrene. The patient recovered and lived for many years as a cook at an inn in Sainte-Maure, where M. Velpeau saw his son and heard his history in 1815. In Perault's case, as in that of Lacroix, the separation of all the parts which it is dangerous to divide had been accomplished without the aid of the surgeon; and these cases are justly styled by Hénot mere simulacra of amputations at the hip.

In December, 1774, Kerr, of Northampton, in England, amputated at the right hip-joint in the case of a consumptive girl of eleven or twelve years, who had coxalgia with lumbar abscess and extensive caries of the acetabulum and of the adjacent parts of the os innominatum. The subject of this unjustifiable operation survived it seventeen days. This is the first authentic instance of a true amputation at the hip-joint, and the result of the case was in one respect, of great value, since it dispelled the exaggerated fears that had been entertained of the immediate danger of the operation, and proved that in more favourable cases an expectation of recovery after this mutilation might reasonably be entertained.

About this period, according to tradition, another amputation at the hip-joint was performed in England by Henry Thomson, surgeon of the London Hospital. It is not recorded, Mr. Curling states, on the books of the hospital. It is supposed to have been a speedily fatal case, and the one probably witnessed by Pott, and which led to his emphatic condemnation of this operation.

For the next twenty years amputation at the hip-joint was commonly described in systematic books of surgery, and demonstrated on the dead subject by surgical lecturers; but we find no instances of its performance on the living. The next example of the operation on record, and the first instance of its performance for gunshot injury of the higher part of the femur, occurred in the French army of the Rhine, in 1793. The operator was the illustrious Larrey, then and thenceforward a zealous advocate of the operation. The patient bore the opera-

tion well, and several hours afterwards his condition was most satisfactory; but it was then necessary that he should follow the army in a precipitate march of more than twenty-four hours duration, in the depths of winter, and he died probably from the exposure and fatigue. It would be superfluous to recapitulate the earnest arguments appended to his report of this case by Larrey, with which he insisted upon the introduction of this operation into military surgery. They are referred to in the most modern surgical treatises, and are given in full in Cooper's Surgical Dictionary, and other readily accessible works.—On their publication, amputation at the hip-joint became a recognised resource in military surgery.

It has been alleged that, in 1794, A. Blandin amputated at the hip-joint three or four times for gun-shot fracture of the upper part of the femur. M. Velpeau states that Blandin operated three times, and saved two of his patients, while the third survived fifty-eight days; and adds that another military surgeon, Perret, in the same year, did a successful amputation at the hip-joint for gun-shot injury. Bourgery says that but one of Blandin's patients recovered. Neither author gives any authority for his statement.

Dr. Wendelstaedt, of Emerichof, near Limburg, on the Lahn, relates that he had examined an English sailor whose thigh was carried away by a cannon ball at the naval battle of Abouqyr, August 1, 1798, and who subsequently underwent amputation at the hip, and who was in good health years after the operation. It is very singular that there is no other record of the case.

In 1799, Larrey performed the operation twice at the siege of Saint Jean d'Acre. One of his patients, an officer, M. Bonhomme, was in excellent condition on the seventh day, when he was suddenly carried off by the plague. The other, a drummer boy, died in an ambulance during the retreat of the army.

About this period it is alleged that Krimer amputated at the hip-joint for gunshot fracture. The patient is said to have died of tetanus on the tenth day.

At Wagram, July 6, 1809, Larrey operated at the hip-joint on two soldiers of the imperial guard. These were intermediate amputations, and resulted fatally in a few hours.

In 1811, Brownrigg amputated at the hip-joint unsuccessfully, at Elvas, in Spain. But he was more fortunate the following year, in a similar operation on a private of the 13th British Dragoons. This man recovered and lived for many years afterwards at Spalding in Lincolnshire. This was a secondary operation, performed December 12, 1812, for complications resulting from a gunshot fracture of the femur received at Merida, in Spain, on December 29, 1811. It is the first successful amputation at the hip-joint recorded in military surgery.—Brownrigg also performed the operation in two other cases during the Peninsula war; these terminated fatally. In this year also Guthrie performed the operation unsuccessfully at the siege of Ciudad Rodrigo.

In 1812, Larrey also operated twice: first, on July 29th, at Witepsk, on a Russian soldier, whose left thigh had been carried away by a cannon

ball. Ribes assisted at this operation. Larrey believed that the patient would have recovered had it been possible to provide suitable nourishment for him. He died from dysentery on the twenty-fifth day, the wound having nearly cicatrized. The other case was that of a French subaltern of dragoons, whose thigh was terribly injured by a cannon ball at the battle of Borodino, on September 7th. He was removed to the abbey of Kolloskoi, and thence to Witepsk, where he remained, under the care of Surgeon-Major Bachelet, until he was nearly well. He was then sent to Orcha, and the surgeon-major in charge there reported to Larrey, three months after the operation, that he had entirely recovered. This case is cited as the second successful amputation at the hip-joint in military surgery, and the first successful primary amputation; but, as the patient never reached France, and his death is not accounted for, the adversaries of the operation will not admit the case as a success.

In the war of 1812, between the United States and Great Britain, no examples occurred of the performance of this operation.

In April, 1814, after the unsuccessful assault on Bergen-op-Zoom, Cole performed this operation by the circular method. A few days subsequently Samuel Cooper operated at Oudenbosch on a soldier who had received at the same assault a dreadful fracture of the upper part of the femur by a grape-shot. Both cases resulted fatally.

Dr. Emery operated, July 2, 1814, on a corporal whose left thigh had been fractured by a musket ball a year previously in Spain. The patient died thirty days afterwards from secondary hæmorrhage.

The third successful amputation at the hip-joint in military surgery was that performed by Guthrie, on July 7th, 1815, at Brussels, on the French soldier, Francois Duguet, wounded at the battle of Waterloo. This man was living at the Hotel des Invalides in 1836.

On August 15, 1815, Mr. Blicke performed the operation at Antwerp, on a soldier with osteomyelitis of the femur produced by a contusion from a musket ball received at Waterloo. The patient survived eight days.

Alcock relates that he was informed by Dr. Belmunt that an accomplished Spanish surgeon, educated at Barcelona, had twice amputated at the hip-joint during the Peninsular war, and once with success.

For the next twelve years peace was maintained in Europe, and no instances are recorded of amputation at the hip-joint for gun-shot injury.

In May, 1827, during the siege of Athens by the Turks, Dr. Bryce, who accompanied Lord Cochrane to Greece, reports that he amputated at the hip-joint in the case of a soldier whose femur was badly shattered by a six-pound cannon ball. There had been copious hæmorrhage, yet the patient is said to have recovered rapidly, and to have been seen six weeks subsequently at Paris, by the operator, perfectly cured. The history of this case is traced for so short a period that it cannot be regarded as an authenticated example of recovery.

On July 29, 1830, P. J. Roux performed the operation without success on a Swiss subaltern wounded in the revolution in Paris. On No-

vember 10th, of the same year, Dr. Clot Bey had an unsuccessful secondary operation at Marseilles.

In 1831, Demme, the elder, performed the operation three times during the campaign in Poland. These were all unsuccessful intermediate amputations for gunshot fracture of the femur. In the same campaign, M. Sédillot had an unsuccessful primary operation.

In 1832, at the siege of the citadel of Antwerp, Letulle performed the operation primarily on an artilleryman whose left thigh was badly shattered by a cannon ball. The patient survived nine days.

Amputation at the hip-joint for gunshot injury was performed at least eight times in the campaigns of the French in Algeria, from 1836 to 1840. Twice by Hutin unsuccessfully. Five times, primarily and unsuccessfully, by Guyon, Bertherand, and others. Once successfully by Baudens, being the fourth authentic instance of the successful performance of the operation in military surgery.

About this time Wedemeyer had a successful intermediate operation, and a primary operation, which resulted fatally. Three fatal primary operations were recorded by Jubiot: and Sir Benjamin Brodie operated unsuccessfully in a case of accidental gunshot fracture of the femur.

In the war between the United States and Mexico, in 1846 and 1847, there were no amputations at the hip-joint.

In the insurrection in Paris, in June, 1848, amputation at the hip-joint was performed for gunshot injury five times by Richet, Baudens, Vidal, Robert, and M. P. Guersant. Richet's was a primary, the others were intermediate cases; all terminated fatally.

During the war in Schleswig-Holstein, in 1848 and 1849, this operation was performed seven times; five times in 1848 and twice in 1849. Five of the operations were done by Dr. B. Langenbeck, and one of his patients, a youth of seventeen, recovered.

In 1849, after the riot in Astor Place, New York, an amputation at the hip-joint was performed at the New York Hospital for a gunshot fracture of the neck of the femur by a musket ball, the patient surviving the operation two days. This was the first instance in which the operation was practised in this country for gunshot injury.

In the war in the Punjaub, in 1848 and 1849, three primary amputations at the hip-joint were performed for cannon-shot wounds, involving extensive lacerations of the thigh with comminuted fracture of the femur. Dr. James McRae states that the patient died—one in six, one in twelve, and one in thirty-six hours, from shock.

In 1853, two amputations at the hip-joint for gunshot injury were performed at Rangoon, in India. One, a primary operation, was done on February 6th, by Dr. J. Fayrer; the patient survived one month. The other was done by Dr. Beatson, six days after the reception of the injury; the patient, a man of sixty-one years, died from the shock of the operation.

In 1854, and the following year, in the war in the Crimea, this operation was performed not less than forty-four times; twice in the Sardinian, eight times in the Russian, fourteen in the British, and

twenty in the French army. Porta mentions that the operations in the Piedmontese army resulted fatally. Pirogoff operated in the eight cases in the Russian army. He describes his patients as in almost every instance anæmic and unfit to undergo so grave a mutilation. Two survived five days; the others perished within two or three days. All of the operations in the English army were primary. Five were performed after Alma, Balaclava, and Inkermann. The director general, Thomas Alexander, did two of these operations. His patients lived to reach Scutari; one, a man of the thirty-third regiment, survived three weeks, and the other, a Russian prisoner, lived a month. Dr. Richard McKenzie operated in another of these cases, and Assistant Surgeon Wyatt in a fourth. Nine operations were performed during the siege of Sebastopol. Two of the patients were officers and seven enlisted men. All of these cases ended fatally. Of the twenty amputations at the hip-joint in the French army, twelve were done in the Crimea and eight at the hospitals on the Bosphorus. Five primary and eight intermediate or early secondary amputations were reported by the operators, MM. Paulet, Lustreman, Thomas, Perrin, Mounier, Legouest, Larivière, Mauger, and Salleron. Such particulars of these thirteen operations as could be collected are presented in the tables in another part of this report. Besides them, seven primary coxo-femoral amputations were done by the French surgeons in the Crimea of which no memoranda were preserved. Three of these were performed during or after the battle of the Alma, September 20, 1854, and three at Inkermann, November 5, 1854. None of these patients survived the operation twenty-four hours, and, consequently, says M. Chenu, their names were not inscribed on the registers of the field hospitals, and it is not known whether they were French soldiers or Russian prisoners.

The Italian war of 1859 was the occasion of at least nine amputations at the hip-joint for gunshot injury, or the complications consequent thereon. A primary operation after the battle of Palestro, by the French surgeon Bertherand, on an Austrian soldier, whose left thigh was shattered by a shell, terminated fatally in three hours. In two primary operations reported by Demme, death resulted from hæmorrhage during the operation. In two other cases the patients survived the shock of the operation but a short time. A secondary operation by Isnard, at a hospital at Brescia, succeeded, and the patient was able to get about on an artificial limb. Neudörfer also had a successful secondary operation at the Santo Spirito Hospital at Verona. Two patients who were sent to Toulon were operated on by M. Jules Roux and M. Arlaud about six months after the reception of the injury in each case, and both recovered.

Two unsuccessful primary amputations at the hip-joint were performed on account of gunshot fracture in the French naval service during the Crimean or Italian wars. The exact dates of these operations are not recorded.

Setting aside the doubtful or unauthenticated cases of Blandin, Perret, Wendelstædt, Krimer, Alcock, and Bryce, there have been

enumerated in the foregoing summary one hundred and eight amputations at the hip-joint performed on account of gunshot injuries or their consecutive lesions. Admitting Larrey's case at Borodino to have been successful, the recoveries were ten in number—one after a primary, four after intermediate, and five after secondary operations—a percentage of mortality of 91.66.

Except in the references to the cases of Kerr, and the alleged cases of Lacroix, Perault, and Thomson, introduced in tracing the early history of this operation, notice has only been taken, in the preceding retrospect, of examples of the operation occurring in the domain of military surgery. Yet the results of the amputations at the hip-joint done in civil practice, especially for such as were performed on account of injury, unquestionably exerted much influence upon the minds of military surgeons in their estimate of the operation. The cases recorded in civil surgery are as numerous as those occasioned by the accidents of war. The French boast of eight successes in civil practice, by Mulder, Delpech, M. Sédillot, Hénot, M. Guersant, Foullioy, and M. Jules Roux, and lament fifteen failures, by Baffos, Pelletan, Dupuytren, Blandin, Gensoul, Delpech, Gerdy, M. Velpeau, and M. Jules Roux.

The German surgeons, if all their unsuccessful cases are reported, have been more fortunate. The successes outnumber the reverses. In thirteen operations Jæger, Hysern, Textor, and B. Langenbeck, each claim one success, and Heyfelder three; while Von Walther, Graefe, Dieffenbach, in two cases, and Heyfelder, also in two, endured the mortification of failure.

Four amputations at the hip-joint for disease, by the Polish surgeons Poliken, Korseniewski, and Porcienko, resulted fatally.

In the annals of British civil surgery not less than forty-seven of these operations are recorded, with sixteen recoveries. The successful operators were A. Cooper, Orton, Mayo, Macfarlane, Mr. Syme, Mr. Cox, Mr. Wigstrom, Mr. Whipple, Mr. Humphrey, Mr. Tatum, Mr. Gamgee, Mr. Hancock, Mr. Holmes, Mr. Lee, and Mr. Godfray. In four of the cases the thigh had previously been amputated in the continuity. In one case, in a child of two years, the operation was done on account of injuries; in the remainder for disease.

In the thirty-one unsuccessful operation, the operators were Kerr, A. Cooper, Brownlow, Bromfield, Carmichael, Mr. Syme, Liston, Smith, Handyside, Mr. Jones, Mr. Hancock, Dr. R. J. Mackenzie, Mr. C. Guthrie, Mr. Wheatcroft, Mr. Adams, Mr. Erichsen, Stanley, Mr. Lane, Badley, Mr. Butcher, Mr. Young, Mr. Wells, Mr. Swain, and Mr. Curling.

In American civil practice, twenty-four examples of amputations at the hip-joint are recorded. Fifteen successful cases are reported; so large a preponderance as to lead to the suspicion that all the unfortunate cases have not been published. The operators in the successful cases were Brashear, Mott, Duffee, Dr. Van Buren, Dr. May, Dr. Bradbury, Dr. Potter, Dr. Blackman, Dr. J. Mason Warren, Dr. Buchanan, Dr. Pancoast, and Dr. Gross.

In the nine unsuccessful cases, the operators were Brainard, Buel,

Clark, Dr. Van Buren, Dr. J. Mason Warren, Dr. Hachenburg, and Dr. Hewson.

Of the one hundred and eleven amputations at the hip-joint in civil practice here recorded, forty-six succeeded and sixty-five ended fatally: a mortality rate of 58.56.

All of the facts here recapitulated were not known to our surgeons at the commencement of the war of the rebellion. Some of them, indeed, have transpired during its progress, or since its termination. But a large proportion of them were well known, and the conclusion deduced from these were not materially modified by the additional cases. It was considered well established, that in amputation at the hip-joint for chronic disease, the mortality was less than in several other major operations in surgery; that the mortality had lessened since the introduction of anæsthetics had furnished the means of diminishing the shock of the operation; and it was hoped that the methods recently proposed for controlling the circulation in the thigh by compressing the aorta might remove another of the great dangers of the operation. It was admitted that, in cases of injury, the results of the operation were very unsatisfactory, and the experience reported from the Crimean war had led to the conviction that, in military surgery, the results were especially discouraging and deplorable.

With such impressions, few of the practitioners who engaged in the surgery of the war looked forward to such exigencies as might require amputations at the hip-joint with hopeful anticipations. Many believed that as patients with terrible gunshot injuries of the upper part of the thigh often lingered for a long period, it was more humane to abandon them to inevitable death than to subject them to a mutilation which was so rarely successful, and such practitioners were willing that the operation should be discarded altogether from military practice. The majority contended that the results had not been so hopeless as to lead us to abandon the operation. Dr. Chisolm, who prepared a manual of military surgery for the use of the Southern medical officers, observed "an unfortunate ambition—we might even use a stronger term of it—a criminal desire, to have an amputation at the hip-joint in the list of operations performed, which misleads many surgeons to perform this disarticulation, when their better judgment teaches them that it must be a useless mutilation." But manifestations of this criminal spirit were certainly uncommon, for the great body of surgeons were earnestly and conscientiously seeking for the best solution of the grave problem of how to deal with the severer gunshot injuries of the upper part of the thigh. There was a disposition on the part of the leading surgeons to give conservative surgery a very fair trial, and the operation of excision of the upper extremity of the femur in such cases as had formerly been treated by extirpation of the thigh was advocated by many.

The accessions to our means of estimating the value of the operation of amputation at the hip-joint as a resource in military surgery afforded by the war of the rebellion, may be summed up as follows:

1. We have learned that the primary operation for traumatic causes

is not uniformly fatal, as has latterly been taught, and are enabled to define three conditions under which it should be undertaken, while two other conditions in which it may be justifiable are left *sub judice*.

2. Much evidence has been brought to controvert the prevailing doctrine that disarticulation at the hip is an exception to the general rule requiring all amputations deemed indispensable to be performed immediately, the eighteen intermediate amputations performed during the war having all resulted fatally.

3. We have proved that secondary amputations at the hip for necrosis of the whole of the femur or for chronic osteomyelitis following gunshot injury, may be performed with as successful results as hip-joint amputations for other pathological causes.

4. It has been shown that when, after amputations in the continuity of the thigh, the stump has become diseased, reamputations at the hip may be done with comparative safety.—*Circular from Surgeon General's Office.*

III.—The Nature and Mode of Propagation of Phthisis. By Wm. Budd, M. D., Consulting Physician to the Bristol Royal Infirmary.

Note from Dr. Paget.

Sir,—The paper I send enclosed was received by me last December, in a sealed packet, from Dr. William Budd, of Clifton, with a request that I would take charge of it until he should direct me to break the seal. At his desire, I opened the packet a few days ago, and I now send you the contents, requesting the favour of their early publication in the *Lancet*. They are an epitome of what Dr. W. Budd has been for some time intending to publish in a more complete form; but his intention has been frustrated, and is still delayed, by the engrossments of professional practice and other circumstances beyond his control.

You will at once perceive the originality of his views, and their very high importance if established. If the evidence now given of their truth be incomplete, it is at least abundantly sufficient to raise them out of the region of mere hypothesis, and ensure their careful consideration by pathologists.

In a letter to me Dr. W. Budd says he can show strong reasons for believing that his views on tubercle, with certain qualifications, apply to cancer also. I am, &c., G. E. Paget.

The following are the principal conclusions to which I have been led regarding Phthisis or Tubercle:

1st. That tubercle is a true zymotic disease, of specific nature, in the same sense as typhoid fever, scarlet fever, typhus, syphilis, etc.

2d. That, like these diseases, tubercle never originates spontaneously, but is perpetuated solely by the law of continuous succession.

3rd. That the tuberculous matter itself is (or includes) the specific morbific matter of the disease, and constitutes the material by which phthisis is propagated from one person to another, and disseminated through society.

4th. That the deposits of this matter are, therefore, of the nature of an eruption, and bear the same relation to the disease, phthisis, as the "yellow matter" of typhoid fever, for instance, bears to typhoid fever.

5th. That by the destruction of this matter on its issue from the body, by means of proper chemicals or otherwise—seconded by good sanitary conditions,—there is reason to hope that we may, eventually, and possibly at no very distant time, rid ourselves entirely of this fatal scourge.

The evidence on which these conclusions are founded is drawn from the following principal sources:

(*a*) Considerations based on the pathology of phthisis, as showing it to consist in the evolution and multiplication within the organism of a specific morbid matter, with a universal tendency to elimination and casting forth of the same, after the type of zymotic diseases generally.

(*b*) Actual instances in which there was evidence to show that phthisis was communicated from one person to another.

(*c*) The geographical distribution of phthisis in past and present times, and, especially, its great fatality now in countries which when first discovered by Europeans were known to be entirely free from it.

(*d*) Its much greater prevalence in low levels and among crowded communities, and its entire absence, unless by casual importation, at very high levels,—conditions which are well known to rule, in the same directions, the spread of zymotic diseases generally, and especially of that group in which, as in phthisis, the morbific matter is cast off in a liquid form.

(*e*) Its very high rate of prevalence in convents, harems, barracks, penitentiaries, &c.—that is to say, under the very social conditions which are known most to favour the propagation of diseases of the zymotic group.

Among the data relating to geographical distribution the following striking facts may be here mentioned:—

1st. When the South Sea Islands were first discovered phthisis did not exist there. Since the aborigines have come into intimate contact with Europeans the disease has not only made its appearance among them, but has become so wide-spread as to threaten their extermination.

The contrast between original entire immunity and present extreme fatality is very striking, and can only be rationally explained by the importation of a new and specific morbific germ.

Try every other supposition, and the facts are inexplicable; make this one supposition, and they are at once explained.

2nd. The late Dr. Rush, of Philadelphia, who made very accurate inquiries to determine the point, satisfied himself that when America was first discovered, phthisis was unknown among the native American Indians. Now it is very fatal to them.

The very significant contrast here exhibited between the past and present history of these two races, in respect of phthisis, is exhibited at once, and at the present time, among the negro race in Africa, in different parts of the area of that great continent.

It is well known that negroes are peculiarly liable to phthisis.

Now, everywhere along the African seaboard where the blacks have come into constant and intimate relations with the whites, phthisis causes a large mortality among them. In the interior, where intercourse with the whites has been limited to casual contact with a few great travellers or other adventurous visitors, there is reason to believe that phthisis does not exist. Dr. Livingstone and other African travellers have given me most positive assurances on this point.

The idea that phthisis is a self-propagated zymotic disease, and that all the leading phenomena of its distribution may be explained by supposing that it is disseminated through society by specific germs contained in the tuberculous matter cast off by persons already suffering from the disease, first came into my mind, unbidden, so to speak, while I was walking on the Observatory hill at Clifton, in the second week of August, 1856. The close analogy in many quite fundamental points between this disease and typhoid fever had often impressed itself on me with very great force while I was engaged in the study of the latter, and in the preparation of the papers which I have published on it. I now saw with a clearness which had never occurred to me before, that, with the exception of the qualifications necessary for their application to a chronic disease—for the most part of slow evolution and indefinite duration,—the conclusions to which I had been led respecting the propagation of fever, might be applied with the same strictness to phthisis also.

This idea had no sooner taken possession of my mind than considerations of great force and in overwhelming number crowded upon me in illustration of it.

In the course of the same evening I drew up some notes on the subject, and before the end of the month my views upon it had taken, in outline, the exact shape which they now have. The long interval which has occurred between the Summer of 1856 and the present date has been occupied in collecting data bearing on the various questions raised by this new theory—in accumulating evidence of various kinds, and in examining and carefully weighing difficulties. During the whole of this long time the subject has scarcely ever been absent from my mind. The result has been only to confirm me more and more in the truth of my first conclusions. I earnestly hope that they will not be lightly rejected. At any rate, I can say that they have not been brought in haste or without due deliberation. I have, in fact, considerably exceeded the ten years, which, with a fine sense of what is due to such an enterprise, the Roman poet prescribed as the time to be given to every composition intended by the writer to endure.

Many causes have helped to prevent me from giving my views on this subject sooner to the world. Chief among them I may name want of time to put them into that scientific form, and clear logical order,

under which alone an innovation so daring has any chance of being entertained, much more of being accepted, by the profession. This task, however, I hope to complete in the course of a few months.—Meanwhile I have thought it well to place this memorandum, by way of record, in the hands of a friend, to be made public at any moment should occasion seem to require it.—*London Lancet.*

IV.—On the Internal use of Lime in Cancerous and Other Tumours. By Peter Hood, M. D.

We have heard a great deal lately about injecting cancers with acetic acid, bromine, &c.; freezing them; burning them; softening them with alkaline, or hardening them by acid caustics; deodorising them; galvanising them. In fact, numerous methods of *local* treatment are being discussed, while *constitutional* treatment is almost abandoned. It may not be ill-timed, therefore, for me to ask attention to the following statements.

Some years ago I was sent for to the borders of Hertfordshire to see a lady who was upwards of eighty years of age. I found her apparently a hale hearty woman, and at first was at a loss to discover why I had been sent for, as she was up and dressed, and appeared as if nothing ailed her. She was naturally of a reserved character and was a woman possessed of a "strong will." Some little time elapsed without her making any reference to the cause of my summons to her. When I asked her why she had sent for me, she replied to my question by asking me whether I believed that the inner powder of oyster-shells would cure cancer. I was somewhat surprised at the nature of the inquiry, and answered that I had never heard of such a remedy for the disease. She then literally unbosomed herself to me, and explained why she had sent for me. She undid her dress, and exposed the left side of her chest, which was perfectly flat, and covered simply by a piece of linen. This she removed, and exposed to view an enormous raw surface, which resembled the body of a sheep after the shoulder had been cut from it. The wound appeared comparatively dry, as I observed nothing indicative of any discharge from it excepting slight sanious discoloration on the linen that had covered it. She told me she had had a cancer of the breast for some years, and that by a steady perseverance in the use of "oyster-shell powder" it had entirely separated itself from her chest as I then saw it. And I could not but remark that no surgical skill could have done it more effectually. She told

me that she had lived for some time chiefly on bread and milk, and seldom had eaten any meat. She had never communicated the fact of her having this disease, even to her sister—a lady who was older than herself,—and her maid was the only person who knew of it. How her sister, who slept with her, could have remained ignorant that her bed-fellow was labouring under some horrible complaint appeared suprising; but, on inquiry, I learned that this old lady had lost the sense of smelling.

Although the diseased mass had separated itself from this lady's person, there still remained the peculiar odour common to external sloughing cancer. I inquired how it was that she had resorted to this remedy, and she gave me the following history almost *totidem verbis*.

"Some years ago a gentleman living near the town in which she resided had a tumour in his cheek as large as a small orange. It was about the time that the late Sir Astley Cooper gave up practice in London and came to reside at Hemel Hempstead. This gentleman thought he could not do better than go and consult Sir Astley about this tumour. Sir Astley saw it and told him that it was a cancerous tumour; and strongly advised him to submit to its removal. This the gentleman objected to have done; when Sir Astley told him that unless he did he would not live beyond six months. On the following Tuesday, being market day, this gentleman was riding through the town, when an old woman accosted him by saying: 'I hope, Sir, you will pardon me; but, seeing your face tied up, may I ask you what is the matter with you?' His reply was: 'My good woman, I have a cancer in my cheek; and Sir Astley Cooper says I shall not live six months.' She rejoined: 'If you will try an old woman's remedy, I am sure it will cure it.' This the gentleman agreed to do; and in less than six months the tumour disappeared, and he got perfectly well."

This lady knew all the parties, and it was the success which attended the remedy in this gentleman's case which induced her to employ it in her own. The following is a verbatim copy she gave me of the directions for using the oyster-shell powder:—

"*For a cancer.*

"Bake a quantity, say half a peck, of oyster-shells for three nights in a slow oven. Then scrape out the *small white* part of the shell, powder finely, and take as much as will lie on a shilling once or twice a day in a little warm water or tea. If that affects the system too much leave off a day or two and commence again.

"Should an ointment be thought desirable, mix the powder

in cream, lard, or quite fresh butter without any salt in it, and apply it.

"This treatment generally requires perseverance for three or four months before its effects are seen.

"The shells to be used are those which are *concave*."

This lady lived for two years after my first visit to her, and ultimately died in an epileptic convulsion, when she was apparently in her usual health. The wound resulting from the separation of the cancerous breast never entirely healed, but she never complained of any discomfort from it.

I have been in possession of these facts for some years, but should not have made them public, owing to the difficulty I felt in explaining the *modus operandi* of the apparently simple remedy of powdered oyster-shell in so formidable a disease as cancer—notwithstanding that I had seen in the case of the lady recorded so remarkable a result from the use of the remedy, and having every reason to believe, from her known truthfulness, the account she gave me of the gentleman who had experienced such decided benefit from it,—had it not been for a conversation I had recently with Mr. Spencer Wells, to whom I related the substance of the foregoing statement. He informed me that he attributed the efficacy of the remedy entirely to the lime contained in the powder. He told me that since he had read Dr. M'Clintocks observations some years ago on the influence of the chloride of calcium in checking hæmorrhage in patients who had tumours of the uterus, he had used lime largely in the treatment of these and other tumours; and he had become convinced that an atrophy and calcification of fibroid tumours, resembling the spontaneous change or degeneration not unfrequently observed in such tumours, was often produced or hastened by the use of lime. And he added that he had reason to believe the change commenced in the coats of the arteries supplying tumours with blood; that these coats underwent first an atheromatous, afterwards a calcareous degeneration—in either case with a diminution of the calibre of the vessel and a lessened supply of blood. If the lime were too long continued, he believed that all the arteries in the body, not those in the tumour only, began to degenerate; the first evidence being the formation of an arcus senilis around the cornea.

This explanation appeared so philosophical, that I felt I ought no longer to observe silence on a subject of so much importance, but submit the knowledge of it to those whose opportunities of seeing diseases of a cancerous nature are greater than mine, and who might feel disposed to give the remedy a trial; as it is one that is not likely to do harm, and *may* in some instances do good.

If there be any force in the reasoning of Mr. Spencer Wells on the facts which he has observed, I cannot see why the nutrition of malignant tumours should not be as readily affected by inducing atheromatous or calcareous degeneration of the vessels which supply them with blood, as the nutrition of innocent tumours would appear to be.—*London Lancet.*

CLINICAL RECORDS.

"Ex Principiis, nascitur probabilitas: ex factis, vero veritas."

Cases Operated Upon by Professors Johnston and Smith for Urethral Stricture, with the Maisonneuve Instrument.

Reported by Junius L. Powell, M. D., Clinical Recorder in the University Hospital, Baltimore, Md.

Case.—Mr. G. H. C., of North Carolina; æt. 39; farmer; has always enjoyed fine health, until within the last three years, at the beginning of which time he began to have some slight difficulty in passing his urine. Has been the victim of two or three cases of gonorrhœa, the last of which was the most serious, but, as he supposed, was entirely cured before the commencement of his present difficulty to micturate. In each case medical aid was called in and he was treated very actively, but in the end his stomach was so much weakened, as to unfit him for farther medication internally, so that his physicians adopted very frequent injections with powerful astringents and caustics. He remembers to have used strong solutions of argt. nit., which brought the blood. Bougies, tipped with lunar caustic, were also inserted, the withdrawal of which was followed by a like result. This difficulty to pass his water increasing, all the means within the knowledge and possession of the surgeons of his section were used with the hope of relief to the patient, but with no success. Bougies and catheters were inserted and allowed to remain, with a view of dilating the stricture, but whatever good effect ensued was only temporary.

His condition becoming intolerable and likely to result most seriously, he was induced by his medical advisers to visit Baltimore and place himself in the hands of Prof. Smith for treatment.

At the time of his arrival he was a great sufferer, having gotten out of bed to make the trip. The right testicle was somewhat swollen, and the parts generally in a highly irritated condition, but as yet no false passages or openings to the interior had been produced by the accumulation of urine in the bladder. April 4th, Professor Smith first saw the patient; with difficulty inserted a No. 2 catheter, and sent him to the University Hospital to be operated on the next day by division of the stricture with the urethratome of Maisonneuve.

Friday, April 5th, A. M.—Prof. Smith visited patient; administered chloroform and operated to his entire satisfaction. Immediately after this inserted a No. 10 gum catheter, which he retains in the urethra, only removing it at intervals to be cleaned.

April 8th, A. M.—This is the third day since the operation. Patient suffers no pain, and no constitutional disturbance presents. He is doing well.

April 9th, A. M.—Patient did not rest so well last night, owing to frequent erections, attended with some pain, which was referred to the glans penis. A little pus is discharged this morning, exhibiting itself around the catheter, which still remains in the urethra.

April 11th, A. M.—Patient very comfortable. Dr. Smith inserted a No. 12 catheter yesterday about 10 o'clock, but its increased size causing some discomfort, the original No. 10 was substituted this morning. Last night the erections were again a source of annoyance and pain. His stools scarcely average one a day, whereupon Dr. Smith directs a Seidlitz. Pus continues to ooze from the sides of the catheter, but in smaller quantities than formerly; appetite good; pulse 72 and strong.

April 16th, A. M.—Patient improving; sleeps very well the fore part of the night, pills of opium and camphor being given with a view to prevent the usual erections.

Last Saturday, April 13th, catheter was permanently removed, and at the next disposition to do so he passed a good stream through the urethra, with no more pain than a little smarting. He has been

passing his water alternately since through the urethra and silver catheter No. 12, which latter is now inserted with no difficulty or pain. Very little pus or blood exudes. Seidlitz powder continued pro re nata.

April 17th.—Find patient up, preparatory to returning home; strong and in good spirits. The day before yesterday is the first time he left his bed, and yesterday he walked down town with no degree of discomfort. Silver catheter No. 12 directed to be inserted once daily, until there is no danger of reünion. He passes as full stream as ever he did and with as much ease. Scarcely any pus perceptible. He leaves with every prospect of a most happy result.

Remarks.—During the past Winter, whilst a resident student in the University Hospital, I was first impressed with the great utility of this instrument, in its effect upon a case of urethral stricture of long standing, which had become hard and gristly, and did not yield in the least to the method by dilatation. The patient was the subject of repeated clinical lectures before the class, and it was only by unceasing perseverance, for a considerable period of time, that the smallest bougie was inserted. This stage being reached, however, the urethratome was introduced, the stricture divided, and permanent relief the result. By Prof. Christopher Johnston, who is always on the qui vive for whatever advancements may be made in the art of Surgery, this new instrument of Maisonneuve was first brought conspicuously to the notice of the Profession of this City, and it is to be regretted that owing to the death of Dr. Schley, Clinical Reporter at that time, no record was preserved of some cases operated upon by him during the early part of last Spring, the results of which I am informed were radical cures. He has at present under his charge, in one of the public wards, a case which he operated on about five weeks ago, and which, though presenting very serious complications, viz., urinary fistula and prostatic abscess, has terminated most favorably.

ORIGINAL CORRESPONDENCE.

"Sit mihi Fas scribere audita."

Philadelphia, October, 1867.

As cool weather comes upon us, there is exhibited a greater activity in medical matters. The colleges have regularly opened for the Winter and Spring session, and their books show a large number of matriculants and second-course men. The introductories have been regularly delivered, and the labours of the session are regularly begun. I was in the amphitheatre some days ago with Prof. Smith of the University, and certainly considered it a privilege to be allowed to listen again to that master's lucid teachings, and to see him, as of old, wield the knife so skillfully. Nine years had elapsed since I last heard the Professor. In those nine years I have seen much Surgery abroad and at home, and I felt a little singular, if that word is expressive enough, to listen once more, in the hall of my Alma Mater, to him who taught me the "Art and the Science."

The first case was that of a man who had suffered for years with a protuberance of the globe of the eye. Lately he had experienced most excruciating pains, rendering repose or sleep almost impossible. He had at length (driven to it by the pain he endured) been brought to present himself at the clinic, hoping to obtain relief from his misery. After anæsthesia had been induced, by the same old mixture I knew well when a student, and the efficacy I have so often proved since in bloody battle-fields, viz: chloroform one part, ether three parts, *by weight*, Prof. Smith proceeded to perform the operation. He first transfixed the eye by passing a needle and stout thread, from right to left, through the globe; then holding on to this thread and drawing out the eye, he commenced a rude dissection of the eye, and after a few moments extirpated it. A small orbital vessel, removed in the operation, was simply compressed with a pair of forceps. After the eye was removed, a tumour of considerable size was found in the orbit. This had occasioned the protuberance.—What was the nature of the tumour, the Doctor said was of second-

ary importance, and he would pay no further heed to it at present, in his treatment. A gentleman expressed his opinion to me that it was a fibroid expansion of the optic nerve. The orbit was then washed thoroughly out with a warm mucilaginous wash, and the lids coäptated nicely and fastened together by the interrupted silver wire suture. Cold water dressings were directed.

The second case was a boy three years old, suffering from stone in the bladder. Although the patient was a small, puny little fellow, yet the Doctor determined to operate at once. Before beginning he gave a most beautiful, concise, and lucid description of the perineal anatomy, and illustrated it and every step of the operation with wax models, true to life. The ordinary steps of the operation were then proceeded with, shortly, clearly, deliberately, so that every member of the large class present could go along with the operator. The operation was the lateral of Cheselden, but when coming to divide the prostate and enter the bladder, the Professor used a gaged gorget for *safety*. It is easy enough, he says, perhaps to go on with the knife, but it is not so safe. He prefers to err on the side of caution. With a properly chosen gorget, you *cannot* do harm; a slip of the knife might produce harm, and harm that cannot be repaired; for should that result in infiltration, in nine cases out of ten death is the result. Dr. Smith is well aware that many eminent Surgeons discard the gorget and trust to their own skill with the knife. This, of course, was the faith in which I was brought up, and it is natural for me then to accept the Professor's teaching, though I have often seen the operation most skillfully performed with the plain long knife, by the eminent Surgeon of the Jefferson College, and never saw a bad symptom follow. But the difference is just this—making it a personal—in case *I* should be called on to perform the operation, I would be afraid to venture on it *without* the gorget, but *with* it, I should be confident. Prof. Smith proceeded with the operation, and in a very short time, held the stone up, a large one, before the class. Water treatment was directed.

The last case presenting itself, was a man suffering from an enlargement of one of the testes. It was connected with a hydrocele. The sac was punctured, the water let out, and a close scrutiny of the testicle allowed. This organ showed so much disease, that

Prof. Smith determined to remove it. He had previously obtained the patient's assent to this step, provided, in the operator's opinion, it was necessary. After a rapid dissection the testicle was removed, and for precaution's sake, a *double* ligature was placed upon the cord. The vas deferens was not included for obvious reasons. The wound was closed, and water dressing and quiet directed.

I am sorry to say that cholera is at last in Philadelphia. It was brought here by a vessel coming from Pensacola. It is of the genuine malignant Asiatic type, though it is confined to the receiving ship "Potomac" at the Navy Yard, and it is inferred that it will not be allowed to spread. The past Summer has been the healthiest in Philadelphia in the memory of man.

W. M. T.

P. S. I would state that the cases referred to above were presented again at Prof. Smith's clinic to-day; all doing well. The local treatment was changed to carbolic acid, diluted seven times. Prof. Smith says that this treatment prevents almost entirely that extensive suppuration sometimes so exhausting. As an example, he removed an adipose tumour once, from over the deltoid: An incision of nine inches was necessitated, yet from this extensive wound, under the use of the carbolic acid local treatment, only one half ounce of pus was created.

Union City, Tenn, 1867.

We will endeavour to give to you a concise and complete history of a case which has just come under our observation, that of a young lady who has been asleep for *eighteen years*. We will enter into detail, feeling that the novelty and interest attached thereto will justify it. Moreover, it will claim the attention of your general readers, as well as the scientific men of your City. Having heard from time to time that a "Sleeping Beauty" was domiciled in a rude cottage distant some ten miles from this place, and we being a lover of the *beautiful*, if not of the *sleepy*, resolved on a fine morning to betake ourself to the secluded retreat of this "Drowsy Goddess." The bed on which reclined the "Beautiful Sleeper" was supplied with linen of immaculate white. The young lady in ques-

tion was enveloped in quiet slumber, with a thin piece of gauze, bedecked with partri-coloured spangles, thrown over the head and shoulders to protect them from the flies. The name of the young lady is Susan C. Godsa—born in Gibson county, Tenn., in 1842, making her twenty-six years of age. She is five feet three inches high, and weighs 140 pounds; deep, dark eyes, and dark brown hair, and very fair complexion, with exquisitely arched eyebrows. In fine, she is a perfect beauty, and looks as if she enjoyed good health. We measured the head from the occiput to the frontal bone, making twenty-one inches—a good sized head for a woman, and withal it was well developed, especially over the seat of intellect, with a marked prominence over each eye, which denotes a good linguist.

We were unable to count the pulse, owing to a tremor that constantly pervades her whole frame during both sleeping and waking. Her respiration numbered 32 whilst sleeping, and is slightly accelerated when awake. Sixteen is the normal number. Notwithstanding the frequency of the respiratory movements it was apparently easy and unimpeded. The expansion of the pupil was normal.

Her bowels are regular, save occasionally when she eats something that disagrees with her. Menstrual flow at regular periods, though scanty, and occasionally attended with pain. Her finger nails have not grown any since she was attacked, and her hair but slowly.

Probable Cause.—She has never received any injury of the head or any part of the body that would probably have given rise to this condition. At the age of eight years she had a stubborn attack of intermittent fever, at which time large quantities of the different preparations of opium were administered, whereupon she was seized with convulsion and attempted to tear her hair and eyes. This was shortly succeeded by a deep sleep, from which she has never recovered save for a few minutes at long intervals. It is possible that she may have been narcotized and a rupture of some minor vessel resulted therefrom. Compression of the brain, such as might result from an effusion of the blood, is evidenced both by the character of the convulsions and the sterterous breathing. She

has convulsion almost every hour of the day and night, at which time the head is thrown forward, the chin resting upon her bosom and sometimes backwards and laterally. Her mother also informed us that, beginning precisely at ten o'clock and terminating at eleven, she has the most aggravated convulsion, and this, too, *every* night.

Her father died at the age of sixty-three. Her mother is still living, and must be about sixty. They have both enjoyed good health, and neither family have suffered from any constitutional disease. The appetite of this patient is good, although she necessarily eats but little, and about the same variety as the majority of well people. In consequence of her early affliction she has received no education, being neither able to read nor write, yet she has an expression both intelligent and refined. When awake she answers questions readily, and is apparently perfectly lucid. She complains a great deal of headache, which, she says, is a combination of sharp and dull pains. She says she never dreams, and is not conscious of pain or of anything transpiring around her when asleep. Our ablest physiologists, however, contend that every one dreams, and that their inability to recall it does not prove the contrary. For instance, the somnambulist not only dreams, but acts his dreams, yet in his waking moments cannot recall the faintest consciousness of it. Much has been written on the theory of dreams, and still the phenomenon is but imperfectly understood. However, it is evident to our mind that dreams imply activity of the cerebrum and intellectual part of the brain, no matter how deeply composed may be the vital or physical department of the encephalon.

Mythology has reckoned sleep and death to so closely resemble as to call them "twin brothers," and even moderns call death the "eternal sleep." But the difference is vast, immense. In *death all* the vital activities *cease*. In *sleep* they *all continue*, though some are materially modified.

It is true, too, that sleep is "nature's sweet restorer," but in this case there is no need of so much restoration, unless we admit that an injury shocks and exhausts the nervous system as much when we are insensible to it, as it does when we are conscious of its most excruciating pangs. For instance, we often see a patient under the influence of chloroform undergoing an operation writhe and

squirm like an impaled worm, and when restored to consciousness is amazed to find that the surgeon has removed a limb. Has his nervous system received the full force of the shock as much so as if he had been conscious of the pain? If so, then we can understand why this patient should sleep 22 out of every 24 hours. She is having convulsions every hour that appear sufficient to sunder every nerve filament, and the destruction of nerve tissue must necessarily be very great, and sleep is indispensable to its restoration. Upon this hypothesis alone can we understand why nature demands so much repose. She takes no physical exercise, neither is there any mental activity, or if any of either it is very insignificant, and the required rest from these sources must be correspondingly trivial. However, as we have before remarked, the appearance of this patient does not justify the supposition that her system suffered from this nervous tremor that pervades her being or the convulsive throes that seize her every hour of the day and night.

Although when in a comatose state she is unconscious of pain, yet her sense of touch seems to be unimpaired. That being the case she should dream, as dreams originate from external sensations. For instance, we feel a cold draft upon us and we dream of storms; we hear a noise like the report of firearms and we dream of a fight, &c. These sensations start a train of ideas, erroneous of course, because we cannot confront the sensation with the actual cause. We know, too, how suddenly our dreams change in both place and circumstances, because they are interrupted by succeeding sensations which successively change the current of ideas.

We feel satisfied that the young lady, if placed under the skillful treatment of some of your many able physicians, could be restored to pristine health. If any of them should feel desirous of visiting this most interesting case, we will take pleasure in accompanying them thither. Such a case must interest every disciple of Esculapius, and but few have the pleasure of seeing such a one in a life time.

B. F. Slaughter, M. D.

New Market, Platte Co., Mo., Oct., 1867.

Capital punishment for the crime of murder, is generally agreed to have been instituted at the origin of the human race, and we

find that Cain, the first of mankind to imbue his hands in his brother's blood, was only saved from it by a special interposition of God himself. (Gen. iv: 14, 15.) That it is the just mode of expiating the heinous crime of murder, we believe all nations of the earth, at all times, no difference what their moral status may have been, have admitted.

The manner of inflicting this penalty upon the condemned has, of course, been as varied as human ingenuity itself. Indeed, the earlier nations of the world seem to have exhausted their skill in mechanics, and labored with an assiduity worthy of a better cause, to devise means the most cruel, whereby they might inflict the greatest punishment upon the culprits; and the chronologist need not go back many centuries in the history of the past, to find this diabolical spirit actuating the human heart.

The Babylonians, and some other ancient nations, disposed of their murderers by incineration. Other nations and tribes, which existed in the intermediate or "dark" ages of the world, executed felons by decapitation, evisceration, flaying, poisoning, drowning, smothering, casting into dens of ferocious beasts, &c. But, as men have advanced in civilization, they have naturally endeavoured to obviate in some degree, the horrors attending the practical application of former modes, and as a result they have, in our day, so modified the custom as to rob it of some of its soul-sickening accompaniments; they have substituted the halter for the stake, the rack and the guillotine! Should the reformation stop here? We are now living in the latter half of the nineteenth century, and civilization and science have an onward progress; it behooves us therefore to keep pace with the times, and remove, as far as may be, the sufferings yet attached to the payment of this, the last debt due to man's depravity.

That an "eye for an eye," &c., is just,—that the principle is correct, we are constrained to allow; but this admission necessitates the inquiry—What is the ultimate aim in executing criminals? For what purpose was the custom instituted? Was it merely to inflict corporeal pain on the victim, that he in his dying contortions might atone for the life he destroyed? If this be the ulterior design in inflicting the death-penalty, we might safely stop short of that

extreme, and obtain the object desired, by suspending the offender, for an indefinite period, by the thumbs!

We apprehend that the design of the law, as it originated from the Creator, was more lenient in its aims—i. e., to balance crime already done; to prevent its recurrence; to save society from the murderer's presence; to exercise a solemn influence, over the minds of any who might otherwise be guilty of transgression; and, finally, to vindicate the majesty of the laws, human and divine!

Then, regarding capital punishment as an indispensable necessity in organized society, it is incumbent upon us, enlightened Christians, to mitigate yet farther, if practicable, the pains of its infliction, and for the accomplishment of that end, to avail themselves of all that scientific knowledge can furnish in furtherance of that laudable purpose.

The spectacle of an individual, wrapped in unconscious and painless slumber, passing from time to eternity, without a sigh, moan, pain or struggle, would be far less repugnant to our Christian and moral feelings, and far less dreadful to the victim, than the half-tragic prelude which often accompanies the modern executions, *with our present improved mode.*

It is the province of the true Physician, to mitigate human suffering wherever he finds it; and he could, with as much propriety, refuse relief to the wounded enemy left on the battle-field, as he can now stand idly by, and not insist on a reform in the direction proposed, namely—*That criminals shall no longer be executed without the benefits of the sleeping boon, Chloroform.*

Our laws claim to be founded in justice and mercy;—let us have them executed accordingly.

This reformation must, of necessity, begin with the medical Profession. Our legislators would never conceive and carry into effect, a plan whereby death would be meted out to the doomed criminal by inhalation. Never!

Criminals sleeping unto death, must have its projectors and advocates among the philanthropic devotees of Physic; let us therefore raise an unanimous voice in favour of this reform, and by the potent logic of justice and humanity, have the question duly considered in every hall of legislation throughout the land.

Respectfully, CHESNEY & BROCK.

LONDON, 1867.

The state of the Medical Profession in London is worthy of both praise and blame. In the way of praise, it may be said that their system of education and examinations insures that every man who enters the Profession shall have at least a passable degree of knowledge. It is impossible for a perfect ignoramus to get a diploma or to become recognized as a member of the Profession. In some things, however, they need reforms. The Examiners here are not the members of the Faculties who give the instruction, but a Board appointed by the Government. They are venerable old fellows, the very youngest of whom is 60 years of age. As a matter of course, their examinations smack strongly of the last century, instead of being up with the times. The Professors in the Medical Colleges complain that they have to give two sets of instructions to their pupils, one to inform them of the answers which their ancient Board will require, and the other to give them the truth. Meanwhile, the members of the Board disdain to learn anything, because they are too old, and they will not resign because their position brings them two or three thousand dollars a year, and so the evil is perpetuated without end.

The London surgeons are very deficient in their attention to hospital ventilation. I have not been able to find more than one of these buildings which was ventilated with anywhere near the completeness which we have been accustomed to attain in Mercy Hospital. The one well ventilated institution here is Middlesex Hospital. I was much interested to observe a fact, which coincides with my experience in Chicago. In Middlesex, exactly as in Mercy Hospital, deaths from pyæmia almost never occur. That part of the mortality of surgery is practically abolished, while in other London hospitals, where ventilation is bad, pyæmia and other kindred results of foul air, cause from ten to twenty-five per cent. of the deaths in surgical cases. Most of the surgeons here admit the effect of the ill-ventilation in causing pyæmia, but they are thick-headed, and inefficient in taking action upon it. I have seen them give all sorts of orders about medicine, food, drink, applications, etc., etc., "tithing mint, anise, and cummin," with great precision,

but never heard one of them order the windows to be opened, though their patients were dying under their eyes for want of pure air. The fact is, some of the great London hospitals are a curse to the community, for they kill more patients by pyæmia, erysipelas, and other diseases generated by close air, than all their surgeons, or anybody else, can cure by the skill of their operations.

Some valuable improvements, however, are being attempted in this country; how far they will stand the test of experience remains to be seen. The surgeons in Glasgow are at present rejoicing in the use of carbolic acid. The substance resembles creosote in its properties. In case of compound fractures and other bad wounds, lint is dipped into a strong solution of the acid and stuffed into the wound until it is full. After a day or two it is removed and a new filling put in the same way, but with a weaker solution. It is claimed that by this method *all suppuration* is prevented, as well as all decomposition of tissue or secretion, that the wounds fill rapidly with new flesh without any pus, and that pyæmia, suppurative exhaustion, and erysipelas are prevented. One of the surgeons at Guy's Hospital showed me a compound fracture extending into the knee-joint, which he treated in that way. The joint never suppurated, nor even inflamed in the least, and healed with rapidity. He stuffed a wound of a compound fracture of the leg, with the preparation, in my presence. The next day, I visited the patient, and found that he had suffered much pain, and looked haggard and worn. I think he appeared worse than men usually do who are treated in a milder way. However, if it is a settled thing that an English hospital must not be ventilated, I think carbolic acid may be a good thing, as being, next after fresh air, the best preventive of pyæmia. It is powerfully antiseptic, and if it will prevent suppuration, it may be very valuable in cases of hectic exhaustion.

The English hospital officers seem generally to be totally ignorant of the value of adhesive-strap extension in fractures. They also are equally blind to the advantages of the single inclined plane for the fractures of the thigh, whereby the irritation of the perineal band is avoided. They generally use the old-fashioned long splint and perineal band.

There is one appendage to every hospital here which we would

do well to use more frequently in America, and that is the water-bed. This, as your readers know, is a chest, or tight bedstead of metal or plank, filled with water. The top is covered with a loose rubber cloth, floating on the water, and made fast and tight at the edges. Patients who have paralysis, or other troubles, which predispose to bed-sores, are laid in these couches, where they float, as it were, in the water, and the pressure being equally on all parts, the bed-sores are prevented.

The lecture rooms in the hospitals and Medical Colleges here are most uncomfortable places. The seats are usually simple boards, only nine inches wide, and without any backs. The patience of the students is most praiseworthy, especially as the lectures are often very dull in the manner of delivery.

Resections of the knee are extensively practiced, even in children. The surgeons deny that it will prevent the limb from growing, provided you do not remove the whole of the epiphysis. The practice here is very often to amputate or resect inflamed knees, in cases where an American surgeon would save the limb and effect a cure. They operate in the first stages, while the disease is yet a simple inflammation, without suppuration or caries; and while, according to American experience, the knee is perfectly curable. In justification of this practice, they say that the cure, if accomplished at all, would be excessively slow, and, therefore, the hospitals could not keep the patients long enough. They would go out and run about on their limbs, and exasperate the disease to actual caries; therefore they think it better to operate at once. The real fact is this: They treat their patients only by medicines, local applications, and rest in the foul air of the wards, and find that they die. As a general rule, they are grossly ignorant of the fact that adhesive-strap extension and pure air will cure the patient without operation. So they take the easiest course, and cut out the joint, or cut off the limb, and thus end the matter, and frequently kill the patient.

Not long since I visited the Dreadnought Hospital. This is for seamen of all nations, and is supported by private charity. The building consists of an old 120 gun ship-of-war, moored in the Thames. It is well cared for, so far as it can be, but the surgeons

complain that, being built for battle, and not for the sick, it is impossible to ventilate it, and that, in consequence, they are scourged severely with pyæmia. They add, also, the curious fact, that every patient who comes in has an attack of bronchitis. As usual, in marine hospitals, the venereal diseases are a prominent pathological element.

Apropos of venereal diseases, they are raising again the question here, whether mercurials shall be given in syphilis. Dr. Drysdale leads off in the negative, with a pamphlet, and has some followers.

On the whole, the impression remains on my mind that the London surgeons are, as a class, sound and able men. They are not brilliant nor showy, but they are solid, and generally not disposed to stretch the truth, and use deceit, for the sake of exaggerating some supposed discovery.

They are, however, slow, and, in some respects, behind the times, and are culpable for not bringing to bear on their patients all the knowledge which they might easily possess.

Edmond Andrews, M. D.

[*Chicago Medical Examiner.*

Mobile, Alabama.

I have been thinking for some time of calling the attention of Physicians to a very serious and obstinate disease I had to contend with, while in charge of the Louisiana Hospital in Mobile, and which, so far as I know, has attracted but little or no attention in this country. It is "excessive diuresis," or what is called in the books "diabetes insipidus," but I think would be more properly named *urinary diarrhœa.*

I have met with some eight or ten cases in the last six months, and have no less than three under treatment at this time. In all cases I have found it accompanied by chronic diarrhœa, and it is totally different from true diabetes mellitus. The affection seems to be nothing but a hypersecretion of the kidneys, the patients voiding from eight to fourteen pints of urine in twenty-four hours, almost normal in chemical qualities and specific gravity. I assure you I

have found it exceedingly difficult to remedy. From meeting with so many cases in my small hospital of sixty beds, I am led to believe the disease must certainly exist in others, and may possibly have escaped attention. I wish you would make some inquiry about it among the Physicians who have been in charge of large hospitals.

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CHARLESTON, S. C., October, 1867.

In glancing over page 22 of the recent Circular No. 7 from the Surgeon General's office, on "Amputations at the Hip-Joint," I find myself reported as having communicated "that Surgeon M. Michel had amputated at the hip-joint several times, and that Prof. Paul F. Eve had performed the operation at least once." By some error the contribution of some other party has been credited to me, as I have learned, for the first time, by the perusal of this paragraph, that Drs. Michel and Eve had performed the operation. I have requested Surgeon G. A. Otis, U. S. A., to correct this error in such copies of the Circular as have not been distributed and hope that you will in like manner correct this mistake when you notice the Circular in your valued Journal.

J. J. CHISOLM.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

"Judex Damnatur cum nocens Absolvitur."

A TREATISE ON HUMAN PHYSIOLOGY. By JOHN C. DALTON, M. D., Professor of Physiology and Microscopic Anatomy in the College of Physicians and Surgeons, New York, etc. Fourth edition, revised and enlarged. Philadelphia. Henry C. Lea. 1867. From the Publishers.

The progress made by Physiology and the kindred Sciences, has induced the author to revise and amend his well known and much admired Work.

Although all parts of the Work have received more or less complete revision, the greatest numbers of additions and changes have

been made in the second section, on the Physiology of the nervous system. The investigations of J. Lockhart Clarke, on the gray substance of the spinal cord, and those of Dr. John Dean, on the medulla oblongata, have been appropriately introduced and the whole volume is made a true reflex of the conditions of Physiological Science at the present day. This Work is so well known, as to need no further notice, for its more extended recognition and adoption.

HEADACHES—THEIR CAUSES AND CURE. By HENRY G. WRIGHT, Member of the Royal College of Physicians, Physician to Samaritan Hospital, etc. From the fourth London Edition. Philadelphia. Lindsay & Blakiston. 1867. From the Publishers.

This excellent Work, for some time out of print, has just been issued. The subject of which it treats is interesting to all, and as it is not examined in detail in larger Works on Practice, this volume is particularly valuable to Physicians, who are constantly consulted in regard to a malady as annoying and perplexing often to them, as it is to the sufferer. The author has presented the whole subject systematically, and has furnished the pathology of each form of headache, with plain instructions for prophylactic and immediate treatment. The Work is subdivided into many "Parts," for convenience, and its contents are thus given:

Part I. Headaches—Their Varieties and Symptoms.

Part II. Headaches—Their Causes and Treatment.

Synopsis.—A. Headaches in Childhood and Youth.

B. Headaches in Adult Life. 1. Dependent on the Circulating System: a. Plethoric—Occasional; Persistent. b. Congestive. 2. Dependent on the Digestive Organs: a. The Headache of Indigestion. b. The Sick Headache. c. The Bilious Headache—Accumulation of bile in the system; Exuberant secretion of bile. 3. Dependent on the Nervous System: a. The ordinary Nervous Headache. b. The Hysteric Headache. c. The Headache of extreme exhaustion and debility. d. Megrims. e. Brow-Ague. 4. Rheumatic and Gouty Headaches. 5. Headaches dependent on Organic Disease.

C. Headaches in Old Age.

THE PRACTICE OF MEDICINE AND SURGERY, APPLIED TO THE DISEASE AND ACCIDENTS INCIDENT TO WOMEN. By W. H. BYFORD, A. M., M. D., Professor of Obstetrics and Diseases of Women and Children in the Chicago Medical College. Second edition, enlarged. Philadelphia. Lindsay & Blakiston, 1867. From the Publishers.

The demand for this excellent Work has already necessitated the publication of a second edition, which contains much new matter and many improvements in regard to the arrangement and discussion of subjects. Dr. Byford is well known, as one of the best and most practical writers in connection with this branch of medicine which he has aided to improve and utilize. The contributions of his pen have always elicited deserved praise, for a uniform easiness and clearness of diction and the author posseses the happy talent of concisely and comprehensively analyzing and presenting all important and interesting details.

This Work is one of the best which has been published and will be valued by all who have not time or inclination, from the mass of kindred literature, to select what is immediately useful and beneficial at the bedside. The vice of most authors, the cacoethes scribendi, is nowhere to be seen, and all of the important subjects are discussed with brevity and comprehensiveness. The chapter on metatithmenia is, in many of its features, novel, but the views of the author are carefully presented and well sustained.

MISCELLANEOUS.

"Non Omnes Eadem mirantur Ament que."—HOR.

RAW FLESH AND BRANDY IN THE TREATMENT OF PHTHISIS.—[At a late session of the Paris Academy of Science, M. Fuster presented a paper on this subject, in which he adduces two thousand additional cases observed by himself and others. The following are the conclusions arrived at in his paper.]

1. The exhibition of raw beef and mutton, and of alcohol in doses varying according to circumstances, arrest the progress of pulmonary phthisis and other consumptive diseases. Under the

influence of this mode of treatment, strength is restored, the countenance recovers its animation, appetite returns, and the patient gains flesh, a fact of which conclusive evidence is afforded by the increase of weight. In a month, or even in three weeks, in several of my cases, the body gained four, six, eight, and even as much as twelve pounds.

2. This general improvement of the system, aided by appropriate treatment of the leading symptoms, checks the hectic fever, diarrhœa, and night-sweats.

3. When these complications have yielded, amendment of the local condition of the lungs, or rather diseased organs, sets in, and the advance of cicatrization can be ascertained by percussion and auscultation.

4. The efficacy of the treatment is not, however, equal in all stages of the disease in question. In the third stage the improvement in general is confined to a prolongation of life, the inevitable issue being merely postponed.

5. In the second stage only can the treatment be considered as really curative; provided, of course, all the hygienic precautions I have dwelt on on a former occasion are strictly attended to.

6. Of all the atrophic diseases in which the treatment is applicable, that in which the greatest measure of benefit is obtainable is pulmonary tuberculosis in all its stages; it is, however, highly beneficial in every form of anæmia, whether resulting from hæmorrhage or from spermatorrhœa; at the conclusion of acute affections, especially typhus and typhoid fever, in the last stage of leucæmia, paludal cachexia, chronic nervous fever, and, in general, in all protracted morbid conditions in which repair is obviously unequal to the expenditure of the system.—*Jour. of Pract. Med. and Surg.*

Employment of Chloride of Zinc and Carbolic Acid in Wounds.—During the vacation, carbolic acid and chloride of zinc have been extensively used by the assistant-surgeons in charge of the surgical in-patients of King's College Hospital; and the application of the former agent to suppurating wounds, and of the latter to the parts involved in formidable operations, has been followed by very successful results. In the following two cases, under the care of Mr. John Wood, the beneficial effects of the chloride of zinc in solution, after Mr. De Morgan's plan, were well exemplified.

On Aug. 31st a man was admitted into the hospital whose hand had just been severely injured by the explosion of a box of detonating powder. The wrist and palm were very much lacerated, two of the metacarpal bones were comminuted, and the skin and tendons

were stripped off from the phalanges of the fingers. The hand was amputated at the wrist-joint, and a thin slice removed from the ends of the radius and ulna. Before the flaps were brought together, a solution of chloride of zinc, thirty grains to the ounce, was applied to every part. Although the incisions were made in close proximity to the seat of injury, and damaged tissue was included in the flaps, the wound rapidly healed. There was very little suppuration, and on September 4th the man was discharged from the hospital. On September 12th the wound was completely healed, and the man presented a sound, firm, and painless stump.

On September 8th a large and rapidly growing tumour was removed from the gluteal region of a man, twenty-five years of age. This growth was of eighteen months' duration, larger than the adult head, and evidently of a malignant character. Two days before the operation the man had a febrile attack, the tumour became painful, and the skin covering it inflamed and glossy. When the growth was exposed by extensive skin incisions, its upper and superficial part was found to have degenerated into a black, semifluid mass, of an intolerably fetid odour; this was scooped out by the hand, and the deep-seated parts, which were white, firm, and marked with all the external characteristics of encephaloma, were carefully dissected away from the recesses of the gluteal region. The sacro-sciatic ligament was exposed, and round this a lobe of the tumour passed into the interior of the pelvis. The black and unhealthy-looking muscular tissue forming the thickness of the flaps was then swabbed with the solution of chloride of zinc. The man has progressed favourably since the operation, and without a single bad symptom. A drainage-tube was passed through the wound shortly after, but, notwithstanding the presence of this, the edges of the incisions quickly united, and the wound is now healing with remarkable rapidity considering its depth and extent, and without any discharge of pus. Carbolic acid has been applied superficially and the drainage-tube was passed in order to prevent putrid and unhealthy fluids from collecting in the deep parts of the gluteal region. *London Lancet.*

Life Assurance Companies—During the past year, several American Life Assurance Companies have established Agencies in Canada, with a view of seeking business amongst us Canadians by holding out superior advantages over English offices. With the internal management of these institutions and the substantial value of their offered security, we have nothing whatever to say; it is a question to be settled by those who attracted by the rates of premium are willing to assume a policy, but what affects us as a Profession

more especially is the amount offered by these offices as a fee for the professional examination of applicants for policies. It has been the rule, and still is in all respectable English offices, to give the Medical Examiner a fee of one guinea for the report on an application of a policy amounting to $2000 and upwards, and a half guinea for examination of candidates for policies under that sum; indeed, some first class offices that we could name, give to their Medical Examiner the fee of one guinea for each and every examination made, no matter what the amount of the policy. Some of the offices of American origin seek to lessen the fees offered, and in one instance in which we were ourselves the Medical Referee, the Secretary wrote to the Agent in this City, and informed him that hereafter the sum of $3 only would be allowed for medical examination of applicants for policies; and, although we had represented the company for some ten months, doing a fair share of business, we were constrained to refuse to work at the reduced rate of fees. This subject has engaged the Profession at home, and the offices were forced to come to terms, and when it is considered the responsibility assumed by the Medical Examiner of an Assurance company, it is but right that he should be well paid for his trouble. We think that the sooner the Profession come to some understanding on this subject the better. For our own part, it has been our rule through life, and often to our detriment, to maintain faithfully the interests of the Profession in the question of professional remuneration, and it is not after the experience of a quarter of a century, that we intend to alter our course. We feel convinced, that all professional men of standing in Montreal will endorse our action in this matter, and we will feel deeply disappointed if any professional brother whose report is worth receiving, should be found willing and ready to condemn our procedure by accepting the conditions offered.—*Canada Medical Journal.*

A New Process for Preparing Anatomical Specimens.—Dr. Brunetti, of Padua, who received a gold medal at the Paris Exposition, has generously communicated to the international Medical Congress the following particulars of the valuable invention. The process comprises four several operations, viz. 1, the washing of the piece to be preserved; 2, the *dégraissage*, or eating away of the fatty matter; 3, the tanning, and 4, the desiccation.

1. To wash the piece M. Brunetti passes a current of pure water through the blood vessels and the various excretory canals, and then he washes the water out by a current of alcohol.

2. For destroying the fat he follows the alcohol with ether,

which he pushes, of course, through the same blood vessel and excretory ducts; this part of the operation lasts some hours. The ether penetrates the interstices of the flesh, and dissolves all the fat. The piece, at this point of the process, may be preserved any length of time desired, plunging in ether, before proceeding to the final operations.

3. For the tanning process M. Brunetti dissolves tannin in boiling distilled water, and then, after washing the ether out of the vessels with distilled water, he throws this solution in.

4. For the drying process Dr. Brunetti places the pieces in a vase with a double bottom filled with boiling water, and he fills the places of the preceding liquids, with warm, dry air. By the acid of a reservoir, in which air is compressed to about two atmospheres, and which communicates by a stop-cock and a system of tubes, first to a vase containing chloride of calcium, then with another heated, then with the vessels and excretory ducts of the anatomical piece in course of preparation, he establishes a gaseous current which expels in a very little time all the fluids. The operation is now finished.

The piece remains simple, light, preserves its size, its normal relations, its solid elements, for there are no longer any fluids in it. It may be handled without fear, and will last indefinitely. The discovery is a magnificent one, and the sooner medical schools are provided with full cabinets of natural and pathological pieces the better.—*Medical and Surgical Reporter.*

Ingrowing Toe Nail.—Dr. Bailey in the Leavenworth *Medical Journal*, suggests the following method of healing this annoying deformity:

"I have found that the *second* toe always presses firmly against and rather beneath the side of the great toe, which very naturally produces the whole trouble. It has occurred to me, therefore, that if this constant *cause* could be dispensed with, and at the same time pressure applied in such a manner as to press the flesh *away* from the nail, a permanent cure could be affected without the use of the knife, which is justly dreaded by the patient. To accomplish this, I got up a bandage, by taking a piece of strong muslin, about one inch wide and *just* long enough to make *two* loops (by sewing) one large enough to slip over the great toe, and the other to slip over the third toe and bring them close together, letting the second toe rest over or above the bandage, where it furnishes precisely the required pressure to crowd the soft parts away from the nail and at the same time remove the pressure that caused the disease.

"In the few cases that I have used this simple appliance, it has

been followed by complete success. It is convenient, not troublesome to apply, and can be worn without dispensing with ordinarily tight boots or shoes, which is, sometimes, quite an important thing, especially if the patient is a lady."

Ovariotomy in France.—M. Boinet has submitted a voluminous report on this subject to the Paris Medical Society. He states that three operations were performed between 1781 and 1783. Then up to the year 1844, no cases are recorded; and it is only from 1861 that they have become at all frequent. Up to March, 1867, he has collected ninety-four cases, forty-three successful and fifty-one unsuccessful. To these he adds twenty-four others, which from a lack of particulars he does not admit into his statistical table, but which furnished five cures and nineteen failures. He also is satisfied that a number of other operations have been performed, but which have never been reported. He denies Velpeau's opinion, that the greater success of the English surgeons in this operation is due to the healthier constitutions of the English people; but explains the results by the fact, that English surgeons operate earlier, before the patients are broken down with the disease, and that the cases are selected with greater care. He maintains that when ovariotomy shall have been accepted in France as a justifiable operation, and practised under suitable conditions and according to well-established indications, the success will be fully as great as attained in England.—*New York Medical Journal.*

Local Anæsthesia and the Royal Society for the Prevention of Cruelty to Animals.—We announced several months ago that Dr. Richardson's method of producing anæsthesia by ether spray, had been applied with remarkable success for the performance of painful surgical operation on the horse and on other of the inferior animals. In accordance with its legitimate function as a public body, the Royal Society for the Prevention of Cruelty to Animals has, we are glad to see, considered the subject worthy of its serious consideration. On Tuesday last Dr. Richardson met the committee of the Society by appointment, and after demonstrating local anæsthesia and performing experiments on himself, Dr. Sedgwick, and Dr. Fraser, proceeded to read a report on the operation which had been painlessly conducted on the horse and on other of the inferior animals. The operations of nerving, of firing, of removing tumours, of castration, and of applying caustics to open and irritable surface, were all, the author showed, easily and rapidly performed under local anæsthesia; indeed, he maintained that if the members of the community demand it, every animal so valuable to man as to be

considered the proper subject for a surgical operation may now be subjected to such operations without any physical suffering. A very interesting point was also brought forward by Dr. Richardson, having reference to the degrees of common sensibility possessed by different animals, as shown by the readiness with which their sensibility was capable of extinction on one uniform process of experiment. It was explained that no two animals possess the same degree of sensibility, and that no animal has so distinct and high a degree of sensibility as man. After man, the horse, amongst the domestic animals, is most endowed, and after the horse, the dog and the guinea pig. Rabbits have a low sensibility. Descending to animals much lower in the scale of creation—viz., to frogs and leeches—the diminution of sense power is so marked that hardly a comparison can be instituted between them and man. Professor Tuson, of the Royal Veterinary College, having been called upon by the chairman, gave striking and valuable corroborative evidence of the complete success of the local anæsthetic process in cases of firing. He had seen as many as forty lines cut in the leg of the horse with the actual cautery, without any indication of pain. He believed that in veterinary surgery the use of the ether spray was not only a means of preventing pain, but an economy to the operator. At the close of the debate, in which Dr. Sedgwick, Dr. Fraser, Mr. Gurney, Mr. Cook, Mr. Mackinnon, M. P., Mr. Colam, and others took part, Dr. Richardson was unanimously requested to allow his report to be printed; and the request having been responded to affirmatively, the committee resolved to publish and circulate two thousand copies forthwith.—*Medical Times and Gazette.*

Venereal Disease in the Horse.—It is well known among scientific men that attempts to communicate syphilitic disease directly from the human species to the horse, by inoculation, have hitherto failed, and the constitutional symptoms which syphilis develops in man have never been reproduced in this animal. There, however, exists a disease, affecting the sexual organs of horses, which, by reason of its contagious character, its virulent local effects and its accompanying lesions of the skin and internal organs, bears a striking resemblance to the venereal disease in man. This peculiar affection, which fortunately appears to be little known outside of France and Algeria, has lately undergone extensive investigation by French veterinary surgeons, and it is with the view of acquainting American readers with some of its characteristics that we venture to prepare this brief communication for your columns.

The knowledge of this disease, at least by European observers,

is of comparatively recent date, it having, as is believed, been first introduced into France in the year 1851 by an imported Syrian stallion. It has since prevailed, to a greater or less extent, in the veterinary depots of France and Algeria, its existence being maintained by contagion and by occasional importations from the East of similarly affected horses. It would seem to the reader who is aware of the signal efficiency displayed by the French government in repelling or restricting the ravages of the cattle plague and other contagious maladies, that this new disease, if propagated solely by contagion, and if curable, as it undoubtedly is, ought to have been crushed in its incipiency, and, by properly applied sanitary precautions, have ceased to exist. If the system of sanitary police practiced in Paris has succeeded in diminishing, even in a minor degree, the spread of maladies of men incident to the "social evil" in that City, with what certainty should similar restrictive and curative measures, enforced upon governable beasts, drive from existence an equine disease which, as we have asserted, bears a notable resemblance to human syphilis. Early observers of the disease, however, appear to have confounded its local effects upon the genital organs with simple herpes, an unimportant complaint, which readily disappears when attention to cleanliness and the application of mild astringent washes are adopted. This imperfect understanding of the new disease led to inefficient modes of treatment and careless restraint of the infected horses. Results consequently ensued not unlike those which the human race would incur, in a more terrible ratio, were physicians to pronounce every preputial sore simple herpes, instead of now and then recognizing genuine chancrous ulcers and treating them accordingly. When, however, more acute investigators came to observe that the ulcers upon the genital organs of the horse were highly contagious and of a more obstinate character than common herpes, and that the local trouble was frequently followed by a train of constitutional symptoms, such as cutaneous eruptions, loss of condition, paralysis and sometimes death, it became apparent that a grave disease of the equine race had appeared, demanding the most careful study and treatment.

The disease in question, we should state, has received no distinctive name in France, although in Algeria it is known as the *Mal de' El-Douren*. The first indication of its seizure of the malo animal, after exposure to the disease by coition, is a swelling and inflammation of the sheath and contained organ. Upon the latter small blisters make their appearance, resembling those of herpes, which, upon the disappearance of the superficial covering become ulcers. These ulcers, unless proper treatment be instituted, and if allowed to become aggravated by filth and the retained secretions,

degenerate into foul and intractable sores. These are the primary steps of the disease.

Its subsequent behavior is invested with far greater interest to the veterinary surgeon, inasmuch as the constitutional nature of the disease, and its dependence upon a subtle poison, which, like the virus of syphilis, invades the entire system, become manifest. Soon after the establishment of the local inflammation and swelling described, a slight fever usually declares itself, and is accompanied, or speedily followed, by a general eruption upon various parts of the body. This eruption, beginning at the crupper, extends along the spinal region to the neck, and subsequently invades the extremities. It is described as consisting of distinct circular, flattened tumefactions of the skin, varying in size from one-half an inch to four inches in diameter, and somewhat reminding the examiner of wheals produced upon the human integument by the application of nettles. The eruption may become so severe and persistent upon the limbs as to cause temporary lameness of the unfortunate animal, but eventually disappears, without leaving any traces of its existence upon the surface of the body.

The more serious, and sometimes fatal, symptoms of the disease remain to be mentioned. The affected horse loses appetite almost completely; waste of flesh and marked physical debility ensue; and in extreme cases, paralysis of one or more parts of the body precedes the death of the animal. The lesions most constantly met with in the internal parts by post-mortem examination, are softening of the spinal cord, and effusion of liquid between the membranes that encase it. M. Viardot found in some of the animals examined by him, an abnormal amount of serum in the ventricles of the brain, and softening of the cerebral substances.

The origin of this remarkable affection is still obscure. An attempt—as we think, a vain one—has been made to link the disease with human syphilis. Another opinion traces the origin to stings inflicted upon the virile member of the horse by poisonous insects. Still another writer imagines the disease to be engendered in the vagina of the Syrian mare, where, according to a custom of the country, breeders introduce irritating substances, like capsicum, in order to excite the fertility of the animal. We dismiss this part of the subject without comment or deduction.

The treatment of the *Mal d'El Douren* resolves itself into two parts; one having for its object the removal of the local inflammation and ulceration of the generative organs, and the other the eradication from the system of the poisonous virus that has permeated the body. The former indication of treatment is met quite as satisfactorily by the application of mild detergent and astringent

lotions to the inside of the sheath and the vagina, as by the employment of the caustic agents advised by some writers. Soap and water, and a weak solution of the acetate of lead, used with the view of removing the vitiated secretions from the affected parts, and imparting tone to the diseased tissues, will usually readily accomplish what is desired. The use of tar water and disinfecting solutions are also recommended where there is fœtor or an approach to gangrene.

The second object of treatment is to expel from the economy the zymotic poison, which, having tainted the blood of the animal through the ulcerated sexual organs, has temporarily interfered with digestion, nutrition and the health of the skin. This purpose, it appears by the statements of persons who have experimented with the disease, is best carried out not by introducing into the blood a direct antidote, such as the soluble salts of mercury are believed by many to be for syphilis, but by reinforcing nature through the aid of nutriment and powerful tonics, and thereby enabling the system to withstand the assaults of the disease until the power of the latter, which is limited, shall have exhausted itself. Acting upon this theory of curing the constitutional symptoms of the *Mal d'El Douren*, strong beef tea and preparations of iron and arsenic are administered to the animal with perfect success.

Although so closely the congener of human venereal disease as this singular affection of the horse is shown to be, it will please the friends of this noble animal to know that the *Mal d'El Douren* is, when rightly managed, thoroughly curable, and "leaves not a wreck behind." The sufferer becomes, after recovery, just as valuable for labour and the purpose of reproducing his species, as he was before the attack.

El Paso.

The Rational Indications for Extraction in Breech Presentations.—By Prof. Briesky. (*Schmidt's Jahrb.*, cxxxiii., p. 87; from Prag. Vjhrschr, 1866.)—The conditions for the favourable success of extraction are based upon the possibility of the rapid and easy delivery of the child, and therefore consist above all in a favourable mechanical proportion between the pelvis of the mother and the body of the child, in the proper preparation and dilatability of the soft parts, especially the complete dilatation of the os uteri, and in the presence of uterine action assisting the operation.—Extraction is not capable of altering the unfavourable conformation of the mechanical factors of labour; it can only substitue traction in the place of the dynamical factor: the uterine force, when this is insufficient or not acting rapidly enough.

As indications on the part of the child we may mention: 1. Prolapsus of the umbilical cord,—because reposition remains unsuccessful in breech presentations, and the pressure of the womb after the complete discharge of the waters, soon endangers the life of the child. 2. The same is true of every breech presentation, as soon as the child is born as far as the umbilicus; therefore any delay in the progress of expulsion raises the indication to excite the uterine activity, and next to extract. 3. Weakness of the uterine contractions arising after the discharge of the waters, even when the breech is still high up in the pelvis, because even with feeble pains the retraction of the uterus will gradually lead to interruption of the placental circulation, and thereby to the death of the child. 4. Sudden death of the mother while labour is in full progress; because uterine activity and placental circulation both suddenly cease. This indication presupposes that labour has progressed so far that the child can be developed more rapidly by extraction than by Cæsarian section; in this case the former offers the only chance of saving a living child.

Among the indications on the part of the mother are all those accidents which urgently demand the termination of labour in the interest of the mother; or in case the child is living, also in the interest of the child; whether it be that the delivery alone can remove the danger to the life of the mother, or that the sufferings of a hopeless condition may be relieved. Extraction, therefore, is indicated: 1. In violent hæmorrhages from the genitals during the progress of labour. 2. In eclamptic convulsions. 3. In rupture of the uterus, unless the parturient woman is already in the agony of death. 4. By all symptoms arising during labour, of whatever nature, which indicate an immediate danger to life, if they can be removed or alleviated by delivery.—*St. Louis Medical and Surg. Journal.*

Inhalations of the Persulphate of Iron in the Atomized form for arresting Hæmorrhage of the Lungs. By G. Bruhl, M. D., Cincinnati.—It is generally conceded, that remedies locally applied, have a more prompt and decisive effect than those administered "*per viam longam digestionis.*" If in a case of severe metrorrhagia, styptic injections are made into the uterus, immediate relief is mostly afforded in a short time.

Therefore, it is reasonable to expect a similar favourable result, if we apply styptic agencies in hemoptysis by means of inhalations in an atomized form. The following case, and the experience of known Professional men, who have paid particular attention to this subject, show the accuracy of this conclusion. A lady of delicate

health about 25 years old, mother of two children, had suffered at different times for the last seven years from slight hæmoptysis. A physical examination of the thorax left no doubt that there existed a cavern in the upper lobe of the right lung. The usual routine of treatment had been employed for a long time, but disgusted with the hypophosphites and cod-liver oil "*et id genus omne*," she had abandoned all treatment until about eight weeks ago, when a severe pulmonary hæmorrhage made her apply again for medical aid. The usual remedies, sugar of lead, tannin, gallic acid, persulphate of iron, ergotin, digitalis in combination with opiates were used, checking the hæmorrhage partially for two or three days, when another severe attack would occur. So things went on for about fourteen days, when one morning I was hastily sent for with the "consoling" message that the lady was in a dying condition. As a last resort I took one of Bergson's insufflators along. I found her with a small frequent pulse, heavy respiration, cold extremities, covered with a clammy perspiration unable to utter a syllable. A wash-bowl half full of blood, standing in front of the bed, revealed plainly the cause of the calamity. Without any hesitancy I forced a solution containing liq. ferr. persulphate ; aq-lauro. ceras. ää ℥ j. ; aqua distill ; ℥ x, by means of the insufflateur in her mouth, keeping on with this manœuvre for about half an hour. To my great surprise her pulse became gradually fuller and slower, the respiration more regular and easy, her hands, warmer, and the hæmoptysis ceased. Internally, I ordered her then ℞ Ergotin ℈ij, æther acetic ℥ i, plumb acetis ℥ ss. morph. acet gr. i, Aq. cinnamon ℥ iss. Syr. simple ℥ ss ; a teaspoonful to be given every hour ; at the same time instructing her husband to have the inhalations repeated, if another attack should happen.

When I called in the afternoon, she had only expectorated a few teaspoonfuls of dark coagulated blood, and perfect reäction was established.

As the result was so favourable I kept on with the inhalations for fourteen days twice, and from thence only once per diem. Since that time never the slightest trace of blood could be detected in her sputa. She has gained in flesh and spirits ; the cough and purulent expectoration have diminished ; the cavernous rales disappearing. If this is attributable to the tonics she is taking now I do not know—anyhow she is improving. In looking over the authorities, I find that other physicians have had similar happy results. Lewin reported 47 cases, of which in 36 the hæmorrhage was arrested after the first inhalation. Zdekauer, 5 cases, where a number of internal remedies had been used in vain ; in 2 cases the hæmorrhage ceased after the first, in one after the second, in one after the third,

in one after the fourth inhalation. Dr. Lingen reports one case with perfect success; Fieber 4; Schnitzler 1; Leibbinger 2; Siegle 3; Tobold 21, needing from one to three inhalations; Wedemann 6; and Waldenburg 6 very severe cases, in all of which but 1, only one inhalation was necessary.

The remedies used by these gentlemen were principally the perchloride of iron, tannin and alum. Besides these, cold water of a temperature of 8–10° R. has been proposed by Fieber, but I do not find any case on record where it has been tried with success. In all severe and obstinate cases the preference has been given to the perchloride of iron; alum and tannin only being applied in milder cases, or where after the use of the perchloride a slight hæmoptysis kept on for some while. The above case shows that the persulphate is equally effective. The dose of these agents is:

Liq. perchloride.,..... ferr. gtt. v.–xx.
Liq. ferr. persulphat.,..... gtt. v.–xx.
Aluminis,..... gr. v.–x.
Tannini,..... gr. v.–xx. to 1 oz. distilled water.

As a corrigens about 20 drops of laurel water may be added.—*Cincinnat' Lancet and Observer.*

Cholera in the United States' Army.—A report has just been issued from the Surgeon-General's Department in the United States' War Department "On Epidemic Cholera among the States' Forces in 1866." This report is of very great interest. It shows very clearly and most instructively the dissemination of the epidemic over a vast tract of country by the movements of troops from two or three infected districts. The first outbreak of the disease among the troops occurred in Governor's Island, New York harbour, subsequent to the infection of the city from Europe. From this locality the spread of the infection by moving bodies of troops is readly traceable to Hart's Island and other posts in the harbour; to Tybee Island, Georgia; to Louisiana, by way of New Orleans; to Texas, by way of Galveston; to Louisville, Kentucky; to Richmond, Virginia; and to La Virgin, Nicaragua Bay. From Richmond the disease was carried to Norfolk, Virginia; from Louisville to Bowling-green, Kentucky. "The probabilities appear to be that the disease was carried from New Orleans up the Mississippi river to various points on that stream, and west of it; and though the whole chain of evidence is not complete, yet there are a sufficient number of known cases of the transfer of the epidemic from one post to another in this region to put this view of the whole movement beyond reasonable doubt." Another principal centre of

dissemination appears to have been Newport Barracks, Kentucky, where the disease was introduced from the infected city of Cincinnati, on the opposite side of the Ohio river. Although it did not prevail to any great extent at this post, yet it is in evidence that it was carried thence to Augusta and Atlanta, Georgia; to Nashville and Memphis, Tennessee.

It is not possible to do more than indicate here the principal lines and manner of dissemination of the epidemic in the United States, so far as the troops were concerned, and to direct the attention of the epidemiologist to this instructive and suggestive report. Out of a mean strength of 12,780 men, there were 2708 cases of cholera reported, and 1207 deaths. Of these there were 1749 cases and 706 deaths out of a mean strength of 9083 white troops; and 959 cases and 501 deaths out of a mean strength of 3697 coloured troops.—*London Lancet.*

Anecdote of Velpeau.—The following anecdote is told of Velpeau, the eminent French surgeon, who died a few weeks ago. Though we must be allowed to express our doubt of its truth, the story is worth repeating.

He had successfully performed, on a little child five years old, a most perilous operation. The mother came to him and said:—"Monsieur, my son is saved, and I really know not how to express my gratitude; allow me, however, to present you with this pocket-book, embroidered by my own hands." "Oh! madam," replied Velpeau, sharply. "My art is not merely a question of feeling.—My life has its requirements, like yours. Dress, even, which is a luxury for you, is necessary for me. Allow me, therefore, to refuse your charming little present, in exchange for a more substantial remuneration." "But, Monsieur, what remuneration do you desire? Fix the fee yourself." "Five thousand francs, madame." The lady very quietly opened the pocket-book, which contained ten thousand franc notes, counted out five, and after politely handing them over to Velpeau, retired.—*Medical and Surgical Reporter.*

A Candid Confession.—Dr. E. Krackowizer presented to the New York Pathological Society, June 27th, the body of a uterus, in the walls of which was imbedded a large fibroma, which he had removed by mistake for an ovarian tumour. The patient died from peritonitis twenty-four hours after the operation.

All surgeons are willing to herald a successful operation, but few, however, have the moral courage to publish to the world their fatal blunders. While we have nothing to offer in palliation of

the Doctor's hasty diagnosis, we must confess that we entertain a high regard for the ingenuousness of the admission.—*Leavenworth Medical Herald.*

Extraordinary Fecundity.—Dr. Becker-Lawrich de Ronneburg communicates to the Society of "Gynæcologie," under the title of extraordinary fecundity, the history of a woman married twelve years, and now pregnant for the nineteenth time. At the outset, she was confined at the full term; then she aborted nine times in succession at four months * * * was delivered subsequently at eight months; and after that aborted anew seven times in succession at the fourth month. At the present time she is again pregnant, but alleges that she feels the precursory symptoms of abortion, such as a sero-sanguinolent discharge, &c. With her numerous and fatiguing occupations, it is not probable that she will now go to the full term. Nevertheless, in spite of the copious hæmorrhage which accompanies her miscarriages and which have often endangered her life, she is fat and well nourished.—*Boston Medical and Surgical Journal.*

MEDICAL NEWS.

"Nulla Dies, Sine Linea."

Mr. Spencer Wells paid a flying visit to New York in September, and was received with marked attention by the Profession. Chief among the entertainments given him was a reception by Dr. Fordyce Barker, at the Mott Memorial Library, to which several hundred physicians of the city and vicinity were invited. Mr. Wells delivered a Lecture on Ovariotomy, at the Bellevue Hospital Medical College, which was replete with good sense and valuable information. Mr. Wells was exceedingly felicitous in his style, and expressed himself as being highly delighted with the advantages students of medicine enjoy in New York, which he said were far in advance of any afforded in Europe.

Prof. N. R. Smith, of the University of Maryland at Baltimore, recently returned from his visit to Europe, when a reception was given by the members of the Profession. During his address, in reply to one of welcome delivered by Prof. McSherry, Dr. Smith said: "A distinguished and wealthy citizen of our own community (Baltimore) I am happy to say contemplates the early foundation

of an institution which will cause his name to be ever revered by suffering humanity."

The International Medical Congress which met in Paris last month decided that cholera was not contagious, but was capable of being communicated by infected clothing, &c., and of being pre-ëminently transportable. We presume the great majority of medical men throughout the world will accept these conclusions as being about correct. Over 800 members from Italy, Spain, Norway, Russia, America, &c., were present. There were many more delegates from the United States than from the whole of Great Britain and Ireland. Among them were Drs. Bowditch, Upham, Warren, and Stearnes of Boston. Drs. Dalton, Fergusson, Haines, and Hutchinson, of New York. Dr. W. Lewis of Philadelphia and Logan of San Francisco. Bouillaud was made president, and among the vice-presidents were Virchow and Larrey. Notwithstanding their large numbers, no American delegate was honoured with an office.

Illuminating the Interior of the Living Body.—"The exhibition of a cat and dog *à giorno* agreeably terminated the proceedings of the evening at one of the meetings of the International Medical Congress. These animals were presented by M. Milliot, of Ker, who has conceived the idea of a new means of pathological investigations founded on the transparency of the splanchnic cavities. The author has been led to this invention by the stomatoscope of Professor Foussagrives, of Montpellier, which consists in introducing electric light into the interior of the mouth so as to facilitate the examination of this part. The apparatus consist in glass tubes of different sizes containing a twisted wire made of platina, and which communicate with an electric machine of Middledorf. The tubes are introduced through the anus for the investigation of the abdominal viscera, and through the œsophagus for the investigation of the stomach. M. Milliot hopes that when this apparatus shall have attained a greater perfection, it may be possible at some future period to apply it to man, and thus arrive at a new means of diagnosticating visceral tumours and other morbid alterations of the stomach, the intestines, the bladder, etc. In the female, for instance, these tubes might be introduced into the vagina and the anus at the same time, and thus serve as a means of making out with greater certainty the different tumours of the ovaries—an important point in practice on account of the frequency of operations on those organs. The author hopes to render the whole human body transparent *intus et extra*."—*Lancet.*

Longevity of Brain Workers.—Reasoning from analogy and from the facts of biography, it would seem that those who are endowed with unusual intellectual powers can work harder and longer, all things being equal, than the rank and file of humanity. The law is that great intellects are incased in sturdy, powerful frames, and the occasional existence of monstrosities serves but to establish the rule. The number of really great men of history is comparatively so small that it is impossible to fully substantiate this theory by statistical facts, but if we take the record of biography from the earliest time to the present as our guide, it would seem to be very clear that intellectual giants are capable of undergoing severer brain labour, with far better prospects of longevity, than men of mere ordinary ability. I have taken the pains to go through the cyclopædia, and to note down the ages of *one hundred* of the greatest men of history, those who have created epochs, and have been the leaders of the world's thought in literature, art, science, and statesmanship, and I have found that the average age of these was much higher than that of literary and professional men generally; nay, even much higher than that of clergymen, the longest livers of all. This list, which covers a period of many centuries, contains such names as Goethe, Coleridge, Lessing, Beranger, Wordsworth, Voltaire, Hume, Milton, Shakespeare, Dante, and Irving, among men of letters; Raphael, Michael Angelo, and Reynolds, among painters; Malebranche, Locke, Liebnitz, Kant, Hobbes, and Hamilton, among modern philosophers; and Socrates, Aristotle, Plato, Cicero, among the ancients; Harvey, Cuvier, Buffon, Galileo, Humbolt, Newton, Jenner, and Faraday, among men of science; Napoleon, Marlborough, Washington, Metternich, Richelieu, Burke, Webster, Calhoun, and Clay, among warriors and statesmen; and Calvin, Luther, Knox, Butler, Paley, and Edwards, among theologians. No one will deny that these and similar names fairly represents the giants of history.—*Geo. M. Beard, M. D., in "Hours at Home."*

A Medical Cannibal.—The *Liverpool Post*, of the 16th Sept., announces the extraordinary fact of a medical assistant actually cooking and dining off a corpse. This disgusting affair took place at St. Thomas's Hospital, London. As a just punishment for such an outrage upon common decency, the medical authorities have publicly dismissed the would-be cannibal in disgrace.

Obituary Record.—It is with regret that we record the death in Paris on the 8th of Sept. last, of Robert Watts, M. D., who has long and ably filled the chair of anatomy in the College of Physicians and Surgeons of New York.

New York Medical Gazette.—The first numbers of this new weekly are very creditably made up, the articles being as varied and as lengthy as the size of the Journal will admit. The editorial management has been confined to Leroy Milton Yale, M. D., who will doubtless be found to be the right man in the right place, and will, with his well-known energy coupled with his literary ability, do everything to make the Journal attractive to the general practitioner. We cordially extend to this new candidate for favour a welcome to our exchange list, and trust that it may rapidly earn for itself an enviable position in the current medical literature of our country.

A Permanent Anæsthetic Wanted.—A reward of $10,000 has been offered by an English gentleman, through the chairman of the London Hospital, to any person who shall have discovered by July 1, 1868, any means by which in all, or nearly all cases, pain can be both permanently and completely extinguished, as it can now be extinguished for a short time.

Dr. Bumstead has resigned his post of Lecturer upon Materia Medica at the College of Physicians and Surgeons, and Dr. James W. McLane has been appointed in his place. Dr. Bumstead has accepted the appointment of Professor of Venereal Diseases at the same College.

Dr. William A. Hammond, formerly Surgeon-General of the Army, has been appointed to the charge of the department of the disease of the mind and nervous system in Bellevue Hospital, New York.

Dr. Roberts Bartholow, of the Medical College of Ohio, has been transferred from the Chair of Physiology and Medical Chemistry to that of Materia Medica and Therapeutics.

Dr. E. S. Donner has resigned his position in the Cincinnati Medical College to accept the Chair of Medical Chemistry and Physics in the Medical College of Ohio.

Dr. D. S. Young has been appointed to tho Chair of Surgery in the Cincinnati Medical College.

M. Piorry is proposed as a candidate for the vacancy in the French Academy of Sciences, caused by the death of M. Velpeau.

Prof. Nelaton.—This distinguised surgeon has resigned his professorship of Clinical Surgery in the Medical Faculty of Paris.

The Germania Sugar Company of Chatsworth, Ill., have 600 acres of beets growing.

EDITORIAL.

"Nullius Addictus Jurare in Verba Magistri."—Hor.

When observing the great number and value of the monographs which are now being published, the Physician first appreciates the inauguration of a new era in medical literature, and next seeks to compare this era with those that are past.

From the period when Sir Benjamin Brodie aroused attention to the cultivation of specialties in medicine, to the time when he reprobated such studies and sought to prevent them, the Profession has analyzed this fruitful question of specialty and endeavoured to decide it.

Arguments on either side have been laboriously prepared and elaborately presented, yet the matter is by most Physicians regarded as *lis sub judice*; if, however, there were no other reason for the cultivation of specialties, it would be sufficient to urge, that in modern times no one attains unquestioned distinction in medicine who neglects such a course; that without such study all true progress would be arrested, and that the most valuable contributions to modern medical literature would be entirely lost. These facts, if theoretically disputed, are practically acknowledged; for the cultivation of specialties is rapidly and happily becoming more and more general with the great body of the Profession.

How conspicuously such a condition contrasts with that which existed during the last century. At that period, and in all times antecedent to it, the great body of Physicians were educated in a manner usually similar and the Professional life of one differed but little from that of the other; it might well be said of medical men then, *ex uno disce omnes*. Uniformity was the characteristic stamped conspicuously on medical life and medical literature. Paris had its livery; so had Vienna and Florence and London and Edinburgh and Dublin, but the material of the whole was identical. Physicians were taught the same lessons and their teaching and practice were as uniform as their lessons. There were exceptions when great men entered the medical arena; for great men have always,

by the originality of their genius, created the exceptions to all rules accepted by their fellows, but the rule was nevertheless conspicuously true. Uniformity was the characteristic then, as individualty is becoming evidently the chacteristic now.

Medical men, like men in most avocations, at present, are not content to follow the beaten path on its dull unvarying round, but, living in an age of discovery, are bringing constantly and consecutively new contributions to enlarge and utilize the Science, to the prosecution of which their lives are devoted. In every community of size are to be found those Physicians who seek distinction in the cultivation of new fields, and the fruits of their labours are being rapidly disseminated. Every monograph of the great number now issued speaks this truth in language unmistakable.

It is undeniable, that the cultivation of specialties has revolutionized the relations and value of our medical literature. Examine the text books of the earlier part of the present century and compare the lessons therein taught, with the truths as announced in Works recently issued, and no one can fail to appreciate the true progress which is being surely and constantly made.

Granting these evident truths, it will be admitted by all candid reasoners, that the chief sources of the improvements indicated are to be found in the monographs of the present period. No one can suppose otherwise, than that the text books now before the Profession are, in the main, compiled from the monographs of the best and most reliable writers. Indeed, it is this fact which gives to the modern text book its chief value; for the writers of these Works judiciously recognizing the truth, that it is distinction to be unquestioned authority on even one subject, wisely, in the preparation of their volumes, give their individual teachings on those subjects alone which they have individually investigated, and, in furnishing the necessary remainder, have recourse to the best monographs of the current period. There is, however, this difficulty in relying upon text books for the exceedingly valuable information contained in modern monographs—that the illustrations, cases, argument and details given in these monographs must necessarily be omitted, and with these omissions the really valuable portion of such productions is materially lost. Again, monographs have in recent years

attained such large proportions, that it is wholly impossible to incorporate them, even analytically, in text books of kindred subjects. This fact might be illustrated by citing the many and large monographs that have been published in the last ten years, but want of space forbids the use of this practical demonstration.—It must be evident, however, from the inability to thus incorporate monographs into text books, that the Physician who relies upon text books solely is depriving himself of the vast amount of information which can chiefly be obtained from the sources indicated.

Another important object in the purchase of monographs is, that the Physician can obtain information on those subjects particularly which are most interesting and valuable to him, and has not to purchase matter which may be immediately useful to others, but not to himself. This economy, not to be commended or observed generally, is of great importance now to a large body of the American Profession.

For thoroughness of detail, argument and exhaustive illustration, the monograph is far superior to the appropriate subdivision of any text book, and when to these advantages are added those of economy and variety in the library, there is every reason for thus briefly commending modern monographs to the notice of the Profession.

☞ Special Notice.—The senior Editor of the Journal, after a long and protracted absence (caused by sickness), has returned to Richmond and resumed the immediate charge of all business connected with the Work. In the past six months, many irregularities have occurred in the financial department of the Journal which, from the circumstances mentioned, could not well have been avoided. For all errors and omissions, in this connection, the Editors ask the indulgence of their friends, rendering every assurance, that in future, all general or financial correspondence will receive immediate and careful attention. A request is here made that all who have not received receipts for money sent or answers to letters, written for information of varied character, will render the facts immediately known.

The junior Editor, not being a resident of Richmond, is not responsible for any errors which may have occurred.

The complaints made in regard to the non-receipt of the Journal are a cause of frequent regret, but the suscribers are assured that these errors and omissions do not occur in the mailing of the Work, as this has been faithfully and carefully supervised.

When the Journal is not received, a duplicate copy will always be sent, unless (as in October) the edition is exhausted.

Many Professional friends have, during the past Summer, rendered valuable aid in connection with the Journal, and the Editors desire to thus return their cordial thanks.

MATRIMONIAL.

Married, at St. Mark's Church, Fincastle, Va., on Monday evening, 28th ultimo, by Rev. E. H. Ingle, Dr. J. R. Godwin to Miss Emma S. B., daughter of Major John T. Wilson, all of Fincastle, Va. No cards.

NOTICES.

☞ The Half-Yearly Compendium of Medical Science; Being a Synopsis of Practical Medicine, Surgery, and Medical Literature.—The first part of this Work will be issued from the office of the Medical and Surgical Reporter on the first of January 1868. It will comprise about 300 pages royal octavo size, and will contain a well-prepared synopsis of the articles in the medical periodicals and monographs, and a general review of the medical literature of the preceding six months, both of this Country and Europe.

In the preparation of this Work we will be aided by many well-known writers, among whom are Drs. L. Elsburg, Samuel R. Percy, R. E. Van Gieson, F. D. Weisse, C. F. J. Lehlbach, S. W. Gross,

George H. Napheys, J. E. Garretson, W. M. Turner, A. Paul Turner, and others.

The Work will be systematically arranged under the folllowing heads—subject to such modifications as time and experience may suggest—and supplied with a copious Index of subjects and authors :

I. Anatomy and Physiology. II. Medical Physics, Botany, Chemistry, and Toxicology. III. Materia Medica and Therapeutics. IV. General Medicine. V. Clinical Medicine. VI. Obstetrics and Diseases of Women and Children. VII. Surgery. 1. General Surgery—Tumours, etc ; 2. Mechanical Surgery ; 3. Orthopædics ; 4. Military Surgery—Wounds, etc ; 5. Fractures and Dislocations ; 6. Amputations and Resections ; 7. Topographical Surgery ; *a.* Head, Neck, and Breast—*b.* Eye and Ear ; *c.* Nose, Mouth, and Throat—*d.* Abdomen ; *e.* Genital Organs ; 8. Diseases of the Skin ; 9. Gonorrhœa and Syphilis ; VIII. Veterinary Medicine.

Terms of Subscription.—Subscriptions will now be received at the following rates :

Compendium, per annum, two numbers, ...	$3 00
" Single number, ...	2 00
" and Medical and Surgical Reporter, per annum,	7 00

This Work will unquestionably be worthy of the confidence of the Profession, and we hope to see it well supported. Any or all of these Works will be furnished with this Journal at twenty per cent. less than cost.

☞ The October issue of this Journal being exhausted, the Editors will pay 50 cts. for each copy of the Journal for that month that may be sent to them. Address Richmond Medical Journal, Locked Box 32, Richmond, Va.

☞ The Editors of this Journal, after fairly trying a liberal policy, for the convenience of many whom the late war left without pecuniary resources, have determined to adopt a complete and permanent change.

Letters, in all respects polite, have been written to very many who had entirely neglected the liquidation of their accounts; to the writer of these letters, there has seldom been manifested the ordinary courtesy of a reply; yet such gentlemen have continued to receive the Journals sent to them. Such a course needs no comment, and each subscriber knows to whom the charges of injustice, discourtesy and illiberality are applicable. The Editors trust that these charges will be appropriately applied.

The credit system, under such circumstances, is therefore abandoned. Apart from its risks, which may be successfully borne, it entails an enormous correspondence upon the Editors, and this painful, expensive, and often futile labour, will no longer be performed.

Notice is then given, that no number of this (the fourth) volume, or of any future volume, will be furnished to any one, unless the amount of subscription is sent with the order. When the period of any subscription terminates, the Journal will be discontinued, unless the amount due for its continuance, is punctually forwarded.

The Journal will be discontinued to all who are in arrears, after the September number of the present year, and for the protection of the Editors, all means practicable will be adopted, for the col lection of the amounts respectively due.

The special arrangements made with a few gentlemen, for this year, will, of course, be respected, and to them the Journal will be continued for the year; though it is asked, that, if possible, the amounts due be forwarded.

The fact that the number who pay promptly is sufficient to fully sustain the Journal, when it is not sent to unremunerative subscribers, and the unsatisfactory experience in regard to those who do not appreciate a credit extended to them, induce the Editors to adopt this course. All in arrears are respectfully asked to liquidate their accounts, long since due.

To all, the Journal will hereafter be furnished, only on the terms specified.

☞ All gentlemen whose letters require a reply, are respectfully

requested to enclose a stamp. This stamp is but a small expense to the writer of the letter, while the very heavy correspondence which has been developed with the Journal Office, makes the cost of stamps a serious tax. This usual request has long been postponed. It is now made with reluctance, and it is hoped that all correspondents will recollect it.

☞ Short Articles.—It is requested, that articles contributed for this Work, should be brief and practical. With few exceptions, long communications are distasteful to readers and are generally neglected; it is difficult to make room for them. Papers of merit are retained for many months, when, if the valuable truths contained were briefly presented, they would be promptly published. It is the desire of the Editors of this Journal to increase, relatively, the Eclectic Department, and, to effect this, original papers of limited extent are preferable.

☞ Where manuscript is sent to the Editors of this Journal, all writers are respectfully requested to state whether remuneration is desired.

There is such a difference in the intention of those writing for this Work, that it is necessary to make this request.

☞ Notices to Subscribers, Advertisers, Contributors and Correspondents.

Receipts for all amounts transmitted, will be sent in the Journal, for the succeeding month.

It is desired to obtain for this Journal one Agent in every City and Town.

All communications sent by mail should be directed to Dr. E. S. Gaillard, Locked-Box 32 Richmond, Va.

European packages, sent through Trubner & Co., 60 Paternoster Row, London, or J. B. Bailliere et Fils, Rue Hauterfeuille, Paris, will be safely forwarded.

It is expected that all expenses will be paid on packages, foreign and domestic, sent to this Journal.

Contributions for publication must bear the signature of the writer, and must be communicated to this Journal exclusively.

Original articles should be written on one side only of each sheet, and the manuscript should be, by the sign (¶), divided into paragraphs.

Contributors can have forwarded to them, at a small expense, one hundred or more copies of their articles, in pamphlet form, provided the order to this effect be received before the period o publication.

The Journal will be sent a second time, when not received one month after the usual period of its appearance.

Rejected manuscript will be returned, if desired, by mail or Express, at the expense of the writer.

Each subscriber will give at length his name, Post Office, County and State.

☞ This Journal is published as a Monthly octavo of ninety-six pages. It is now the larges Medical Monthly issued in America.

The Editors offer to pay, at the highest Journal rates, for ARTICLES, ESSAYS, CORRESPONDENCE and REVIEWS OF RECENT WORKS.

The terms of this Journal have been changed; see notice on the cover.

BOOKS AND JOURNALS RECEIVED.

Notes on Epidemics. By Francis Edmund Anstie, M. D. Philadelphia. J. B. Lippincott & Co. 1866. From the Publishers.

Physiology and Pathology of the Mind. By Henry Maudsley, M. D., London. D. Appleton & Co. New York. 1867. From the Publishers.

Catalogue of the Army Medical Museum—Surgical, Medical and Microscopical. From Surgeon General U. S. A. 1867.

"Huffland's Art of Prolonging Life." Edited by Erasmus Wilson, F. R. S., London. Lindsay & Blakiston. Philadelphia. 1867. From the Publishers.

An Inquiry into Modern Anæsthesia. By Trueman Smith. Hartford. Brown & Gross. 1867. From the Publishers.

Inhalation: Its Therapeutics and Practice. By J. Solis Cohen, M. D. Philadelphia. Lindsay & Blakiston. 1867. From the Publishers.

Methomania: A Treatise on Alcoholic Poisoning. By Albert Day, M. D.—Boston. James Campbell. 1867. From the Publisher.

Infantile Paralysis and its Attendant Deformities. By Charles Fayette Taylor, M. D. Philadelphia. J. B. Lippincott & Co. 1867. From the Publishers.

Injuries of the Eyes, Orbit, and Eyelids. By George Lawson, F. R. C. S., England. Philadelphia. Henry C. Lea. From the Publisher.

Practical Dissections. By Richard M. Hodges, M. D. Philadelphia. Henry C. Lea. 1867. From the Publisher.

Physiology of Man. By Austin Flint, jr., M. D. New York. D. Appleton & Co. 1867. From the Publishers.

Cellular Pathology. By Rudolf Virchow, M. D., Berlin. New York. 1867. Robert M. DeWitt. From the Publisher.

Transactions of Ohio State Medical Society, held June, 1867.

A Contribution to the History of Hip-joint Operations. By Paul F. Eve, M. D., Nashville, Tenn. From the Author.

West, On Diseases of Women. Henry C. Lea. Philadelphia. 1867. From the Publisher.

"Epidemic Meningitis." By Alfred Stille, M. D. Philadelphia. Lindsay & Blakiston. 1867. From the Publishers.

"Chemistry." By Brande & Taylor, London. Henry C. Lea. Philadelphia. 1867. From the Publisher.

Transactions of American Medical Association. 1867. From the Secretary of the Association.

Report of the Pensylvania Hospital for the Insane. 1866. By Thos S. Kirkbride, M. D., Philadelphia.

Minutes and Proceedings of the thirteenth Annual Meeting of the Medical Society of the State of North Carolina. 1867.

The following domestic Exchanges are regularly received:

The Atlanta Medical and Surgical Journal, Ga.
Boston Medical and Surgical Journal, Mass.
Braithwaite's Retrospect, New York.
Buffalo Medical and Surgical Journal, New York.
Chicago Medical Journal, Illinois.
Chicago Medical Examiner, Illinois.
Cincinnati Lancet and Observer, Ohio.
Druggist's Circular and Chemical Gazette, Philadelphia, Pa.
Galveston Medical Journal, Texas.
Journal of Applied Chemistry, Philadelphia, Pa.
London Lancet—Reprint—New York.
New York Medical Record, New York.
New Orleans Medical Journal, Louisiana.
New York Medical Journal, New York.
Pacific Medical and Surgical Journal, San Francisco, California.
St. Louis Medical and Surgical Journal, Missouri.
Southern Journal of the Medical Sciences, New Orleans, Louisiana.

Southern Medical and Surgical Journal, New Orleans, La.
The American Journal of Pharmacy, Philadelphia, Pa.
The American Journal of Medical Sciences, Philadelphia, Pa.
The Dental Cosmos, Philadelphia, Pa.
The Detroit Review, Mich.
The Medical and Surgical Reporter, Philadelphia, Pa.
The St. Louis Medical Reporter, Mo.
The Western Journal of Medicine, Indianapolis, Ind.
The Journal of Materia Medica, Lebanon, N. Y.
The Leavenworth Medical Herald, Kansas.
The American Journal of Dental Science, Baltimore, Md.
The Quarterly Journal of Psychological Medicine, N. Y.
The Medical Gazette, New York.

FOREIGN EXCHANGES.

The London Lancet.
The Ophthalmic Review, London, Eng
The Medical Mirror, London.
The Canada Medical Journal, Montreal.
The Dublin Quarterly Journal of Medical Sciences, Ireland.
Le Mouvement Medicale, Paris, France.
Journal de Medicine Mental, Paris, France.
Revue Medicale, Paris, France.
Revue de Therapeutique Medico, Chirrugicale, Paris, France.
The Medical Press and Circular, Dublin, Ireland.

MISCELLANEOUS.

The American Naturalist, Salem, Mass.
De Bows' Review, 80 Broadway, New York.
Richmond Eclectic, Va.
The Planter, Richmond, Va.
The Farmer, Richmond, Va.
Littell's Living Age, Boston, Mass.

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The Richmond Medical Journal.

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ORIGINAL COMMUNICATIONS.

"Qui Docet Discit."

Art. I.—Hydrophobia. By George L. Robinson, M. D., Baltimore.

As the disease, which is the subject of the following report is one of extreme rarity, and of great interest on account of the obscurity attending its pathology, I submit the accompanying record of the first case which has occurred in this City for twenty years.

On Monday, March 25th, I was called to see E. McC., æt. 12. His mother stated that he had had a chill, on the preceding day, after violent exercise in running, and had passed a feverish night. I found him in bed, with hot skin, small, weak, rapid pulse, about 120, high-coloured urine, extreme weakness, and complaining of intense headache and pain in the back. His tongue was moist and covered with a white coating, and the secretions of the mouth were very viscid, with some congestion of the velum palati and tonsils. When asked if he had any pain, he stated that his throat felt sore, and it hurt him to swallow.

Auscultation throwing no light upon the diagnosis, and not finding any functional derangement or organic lesion to account for his

extreme prostration, I attributed his condition to the influence of incipient typhoid fever, looking upon the uneasiness about the throat as due to simple intercurrent angina. Prescribed a tannic acid gargle, beef-tea, milk-punch, and three grain doses of ammon. carb., with a grain of quiniæ. sulph., ter. die.

His condition remained about the same through the two following days until Wednesday afternoon, when his prostration had much increased. He now complained of a smothering about the chest, but there was nothing abnormal in the respiratory sounds, the air entering all parts of the lung freely. Upon attempting to examine his throat I found great irritability about the fauces, the pressure of the spoon upon the anterior portion of the tongue being sufficient to excite vomiting.

Continued the treatment, giving two ounces of beef-essence and an ounce of strong milk-punch alternately every two hours, which he usually succeeded in swallowing, sometimes, however, rejecting it immediately.

Saw him again on Thursday morning and to my astonishment found unmistakable symptoms of fully developed hydrophobia.

Upon questioning his parents closely I found that, about six weeks before, he had been bitten on the cheek by a dog to whom no suspicion of madness had attached, but who had been killed as a dangerous animal. No application of caustic potash or other escharotic had been made to the wound, but it had been allowed to heal up spontaneously. The scars upon his face were now hardly visible, looking like common cicatrices without any inflamed areola or other evidences of excitement in them. He had experienced no smarting or burning pain in the bitten part, and the whole subject had been forgotton until the explosion of the disease elicited inquiry.

His mother stated that during the previous (Wednesday) night he had started from his sleep exclaiming that he was suffocating, and had been growing worse until he was in the condition I then saw him.

I found him in a state of incessant jactitation; tossing himself violently from side to side; throwing his arms and legs about; rolling over and over; burying his face in the pillow; and throwing

off every particle of covering, without seeming able to exercise the slightest control over this ceaseless muscular action. When offered rewards if he kept still for five minutes, he would promise to do so, turn on his back, close his eyes, and lie perfectly quiet for a few seconds, evidently with great efforts at self-control, but then start up again with the same violent tossing, declaring that he could not help it. This attempt to control himself was made over and over again, but always with the same result; and the most casual observer would have recognized that the action of his muscles was entirely involuntary.

There was a peculiarly wild excited look about his eye, the pupil being widely dilated and not contracting under the influence of light; and the whole face expressed anxiety and distress. The pulse was almost imperceptible, imparting only a slight thrill to the finger; there were cold spots on the wrists; and the whole surface of the body was covered with a cold clammy sweat. The feeling about the pharynx had increased to an agonizing sense of constriction, and he was continually pulling at it, as if to tear away some obstruction. His breathing was very quick and labored, the dyspnœa at times coming on in paroxysms and being aggravated by continued retching.

The secretion of viscid clammy saliva was enormous, and he spit out large mouthfuls of it every two or three seconds, so that the floor by his bed was wet over a surface of several feet.

Authorities state that the sound of falling liquids causes a sudden increase of the paroxysms in this disease, and fills the patient with horror, but I repeatedly tested the fact and found that the sight and splashing of water did not terrify him at all, and did not produce any sudden access of spasm, although his general excitement seemed to be somewhat heightened by it and by the reflection of light. He was always willing to attempt swallowing, and, under our urging, would nerve himself to the effort, and, although it required great determination to do so, would persist in taking fluids into his mouth, and still succeeded in getting down about a tablespoonful at each attempt.

The history of the case; the spasmodic affection of the muscles of deglutition and respiration; the excessive mental agitation; the

uncontrollable muscular action; the intense sensibility about the nerves of the mouth and pharynx; the incessant ejection of large quantities of saliva; and the spectral delusions which he once or twice experienced, left no doubt about the positive diagnosis of hydrophobia.

I at once asked Dr. Alan P. Smith and Dr. Claude Baxley to see him in consultation, although the case was almost a hopeless one from the extreme prostration of the child.

We gave a hypodermic injection of one-sixtieth of a grain of atropia and one-sixth of a grain of morph. sulph. to relieve the muscular action, intending to administer sulphuric æther by inhalation if it did not succeed, and ordered thirty grain doses of potass. bromid. every hour, in the hope that its calmative action upon the nervous system might be of some avail.

The injection completely controlled his jactitation and he lay perfectly quiet, but unfortunately he was too far gone, the pulse having been scarcely recognizable for several hours, and, although we resorted to every external means of stimulation at our command, no reäction occurred.

The spasms of the muscles about the throat increased until he was unable to swallow even a few drops of chloric ether and ammonia, and he gradually sank until death put an end to his sufferings during the afternoon of the same day, about twenty hours after the first violent symptoms.

The fact of his being a child and therefore more susceptible of morbific influences, and more incompetent to resist the efforts of such a poison as that of hydrophobia, made him succumb rather earlier than is usual in this disease, and allowed us no time for observation upon the results of treatment. For this reason I deeply regret not having been informed of the bite when I first saw him, for I cannot help thinking that *possibly* the explosion of the disease might have been delayed (or even altogether arrested?) by the use of the drug which we prescribed, Bromide of Potassium. I should at least like to have been able to have tested its efficacy.

Many medicines have been tried, and tried fruitlessly, in this opprobrium medicorum, but I know of none whose remedial action

offers theoretically a more philosophical application to the symptoms of hydrophobia.

For some years many nervous diseases, which before were treated after a blind routine, or on a false system of therapeutics, have been alleviated and often permanently cured by the administration of the bromides. They appear to have a peculiarly elective action upon the nervous system, but what that action is, or how it is exerted, is still a veiled question, which the eye of modern scientific investigation has been unable to penetrate. But, although we may be ignorant of their methodus medendi, experience has proven that their power is incontestable in the relief of many nervous affections, whose ultimate pathology is as yet perfectly unknown to us.

Epilepsy, hysteria, convulsions, chorea, insomnia and delirium tremens, whose essential nature we cannot explain, have all experienced the happiest effects from the administration of potassii bromide, and it often appears to have a magical power in allaying the wild excitement and calming the exhausting wakefulness of mania.

In hooping cough a solution of ammoniæ bromide lessens the extent and duration of the paroxysms more than any other remedy in use, and some practitioners claim that it will cut short the disease.

Professor Bibron, of Kentucky, and Dr. Hammond also in his experiments, seems to have established proofs of their efficacy in the treatment of poisoning from snake-bites, as if they possessed a peculiar and unexplained value in neutralising the effects of such poisons.

Now hydrophobia is an affection of undiscovered pathology, but it is essentially a nervous disease; like hysteria it is a "manifestation of deficient vitality in that puzzling part of the circle of life which lies between spirit and matter," and all the prominent symptoms are referable to abnormal power or preverted action on the part of the nerves, and perhaps especially of the pneumogastric, while the exhaustion which is usually the direct cause of death is brought about by the deprivation of food.

The most striking feature in hydrophobia, and the obstacle which medical science has always failed to overcome, lies in a peculiar sensibility, a sort of hyperæsthesia, of the nerves distributed to the organs of deglutition and respiration, thus embarrassing the respi-

ration, and entirely preventing the ingestion of solid or liquid food. But there are other nervous diseases in which we meet with somewhat analogous spasms of the same parts, such as pertussis, some forms of epilepsy, hysteria, and convulsions, and, if we possess a remedy with which we relieve these symptoms in every day practice, in these common affections, it certainly seems rational to infer that it may be likewise beneficial in controlling or alleviating the peculiar and distressing spasms of hydrophobia, especially if the drug is to a certain extent an antidote to the insidious poisons of snake-bite, &c., as Dr. Hammond leads us to conclude.

What the nature of the poison may be that is communicated by the rabid animal we know not—why it should reside so long in the system in a latent state we cannot explain—why it should exert its poisonous effects upon a particular set of nerves and the muscles to which they are distributed, is still a mystery to us. But if we hold in our hands a drug which has a peculiarly calmative influence over abnormal action and perverted distribution of nervous power which under other circumstances controls general and local convulsion, is it pursuing an ignis fatuus to hope that what succeeds in relieving spasm of the same muscles in other maladies, may not lose its virtue when confronted with the appalling disease under consideration.

In all the records of cases of hydrophybia, which have fallen under my notice, death has been generally attributed to the exhaustion consequent upon the inability to take nourishment, and not to any direct effects of the poison imbibed; so that it is inferred that, if this point could be gained, a cure might be anticipated.

Now if there were reason to fear hydrophobia in any case, might not the administration of this remedy, which has an elective alterative action on the nervous system, prevent the outbreak of the disease? But if the spasms were already established, and should bromide of potassium really possess the power claimed for it, the drug could very easily be thrown into the stomach through elastic tubes, as food is given in cases of wound of the throat.

Whatever be the value of the above suggestion, this medicine certainly deserves a fair trial in a disease where all other known remedies have failed to be of use. Its administration, to my mind, offers a reasonable hope of success, and its happy influence over

nervous diseases in general claims for it a place in the treatment of this obscure disease, which we have been accustomed to regard as beyond the reach of all human skill, and as destined to run its fatal course without our being able to arrest its sure tendency to death.

Art. II.—Union by First Intention—Amputation of Carcinomatous Breast—Lithotomy. Read by James Bolton, M. D., of Richmond, Va., before the Richmond Academy of Medicine, Nov. 7th, 1867.

The following cases of remarkable interest, as bearing upon the principle of union by first intention, having occurred in the course of my practice, I thought it well to put them on record for the purpose of casting, if possible, a glimmer of light upon this deeply important principle. Having obtained all the information possible in regard to the circumstances under which wounds unite by the first intention, may we not at length be able in many instances to surround our patients with these favouring circumstances and thus save time, suffering, and perhaps life itself.

The first case is that of an Irish woman, about sixty years of age, with a cancerous tumour of the breast. The tumour had the usual characteristics of carcinoma in respect of hardness, lancinating pain, and close connection with the gland tissue. It was quite moveable over the pectoral fascia and there was no retraction of nipple and no cachexia. I removed the entire gland, which was of considerable size. There was very little hæmorrhage and I was compelled to tie one vessel only. The edges were brought together by silk sutures and a light dressing of lint applied without adhesive plasters, compress or bandage. Great was my astonishment to find during the whole process that not a single drop of pus appeared upon the line of incision. So much so that, although I occasionally raised the lint for the purpose of inspection, I never changed it. It always lay loosely upon the surface and was not soiled. Paget in his work on Surgical Pathology mentions an instance of this sort in which

the cut surfaces united almost throughout by first intention. At the ond of the incision, next the axilla, a little pus appeared.

The circumstances of this case seemed very hostile to such a favourable result, viz:

The age of the woman being about sixty years—the nature of the disease carcinoma—the large size of the cavity to be closed—the season of the year being mid-winter—the place of residence being a miserable hovel on the South side of the canal-basin, and the room dark and uncleanly—and, finally, it being the fourth year of the recent war, when provisions were exceedingly scarce.

The second case is that of a little boy three years of age, upon whom I performed the operation of lithotomy on the 17th of Sept., 1863, making the usual lateral section. The boy was three years of age, with good general condition of health. Nothing unusual occurred in the course of the operation. The thighs were bandaged together, and the patient was kept lying upon the left side as much as possible. This rule, however, was not very strictly observed on account of the age and restlessness of the child. A clean sheet, thickly folded, was laid beneath the patient. To my great surprise no urine passed through the wound after forty-eight hours, and of course there was no suppuration. The sheet remained perfectly dry; the urine passed per viam naturalem; and the power of retention was restored. In this case the circumstances were more favourable than in that of the former, viz: The age of the child; his good health; there was no blood disease; the season was earlier, being in the Fall; he was living in a comfortable house on one of the hills in the suburbs of the City; although provisions were scarce, I have no doubt that he was well supplied by his parents, who were industrious and in comfortable circumstances.

Observations.—1st. There was no adhesive plaster nor bandage applied in either case. I believe that these are occasionally, perhaps often, applied so as to exert too much pressure upon the vessels leading to the wound, thus interrupting circulation, and interfering with the adhesive process.

2nd. The scarcity of provisions prevented these patients from indulging in the excessive use of food, especially of gross salt meat, so that the blood was in a healthy condition.

If this observation be correct, it favours the practice, now nearly obsolete, of preparing subjects requiring surgical operations by suitable regimen, before the performance of the operation. It is well known that Dr. Dudley, of Kentucky, the great lithotomist, attributes his wonderful success in a great measure to the previous preparation of his patients.

3rd. They were not in crowded hospitals nor in the midst of a vitiated atmosphere, nor exposed to erysipelas, &c.

[These cases occurred in civil practice. Some very remarkable ones occurred in military practice during the recent civil war, which it would be well to put on record.]

ART. III.—POLYPUS OF CERVIX UTERI—ABSCISSION WITHOUT LIGATING PEDICLE—CURE—SUBSEQUENT PREGNANCY. By MIDDLETON MICHEL, M. D., Charleston, S. C.

In an empirical science like that of medicine, in which Professional opinions, from being simply conflicting, too often become absolutely discordant, we should be mindful, that, in certain cases, there exists a degree of positiveness, which an exact pathology has furnished, and upon which rests a diagnosis as easy as it is accurate. No case, therefore, is so simple but that its rehearsal may serve to reiterate instruction, or exhibit the triumphs of a precise diagnosis.

The application of this brief criticism, is found in the particulars of a very simple case, whose history will relieve our science of the discredit of incertitude and failure.

In Oct. 26th, 1866, I was summoned to Mrs. ——, of this City, a lady about 37 years old, and mother of four children. This lady had been a complaining invalid, for more than three years, with cancer of the womb, as it was stated.

I found this patient in bed, feeble and anæmic, when the following circumstances were narrated: Mrs. —— stated that she had noticed some irregularity about her menstruation shortly after the birth of her last child, which was ten years old, but this functional disturbance did not appear to derange health until about three years

ago, since which period, she could say she had never been perfectly well. She had not been pregnant since the birth of her last child. During the last three years her health had notably declined, and required the more or less constant supervision of her physician. She was often compelled to summon her medical adviser, with injunctions of haste, since the flow of blood, which was frequent at first, became abundant, and gradually continuous. This last feature of the hæmorrhagic flux, had for twelve month's excited the attention of all concerned. She was daily losing strength and flesh; was both anæmic and hysterical. In an inconsolable frame of mind, she seemed hopelessly despondent, in announcing to me that her physician had told her she had cancer, which remedies might alleviate but could not cure. She had taken every preparation of iron, every tonic, and used daily various injections to arrest hæmorrhage, without experiencing even temporary relief.

During this recital, to which I listened attentively, I remarked the complexion, which was pale and white, but did not present the cancerous hue. She was emaciated; no signs of dropsical effusion existed; there was, and had been no fever; no vomitings; the appetite was good. With regard to pain—with the exception of a dragging sense of weakness in the back, there was no local pain whatsoever; no mention of the characteristic lancinations of a cancerous disease. The only discharge of which she spoke was the hæmorrhage. This never presented other than a bright red colour, like healthy blood; there had never been any offensiveness connected with the discharge.

Feeling some certainty in my own mind what was the true nature of her disease, I specially inquired, before expressing any opinion, whether she endorsed her several statements: that there was no lancinating local pain; no offensive slate-coloured discharge, compelling her to make her ablutions both tedious and fatiguing; that for the last two years, she had bled almost continuously, with loss of her accustomed strength, but with good appetite and sleep.

To all of which she again replied in the affirmative.

Expecting to meet with a polypus somewhere in the uterus, I now instituted a digito-vaginal exploration, when greatly to my satisfaction, I discovered a polypus of spongio-vascular nature,

suspended by a pedicle attached to the inner and left side of the cervix uteri. It served to fill the upper part of the vagina, and to the *touch* might very well have imposed the belief of a fungous degenerescence of the mouth of the womb, had not the finger circumscribed easily the pedunculated portion of the growth, which it traced to the surface of implantation. I told her she had a polypus, which I would remove. Desiring to know, whether, if I operated, I could cure the cancer, I replied that she had no cancer, but that she would get well after the operation. Very much surprised at this expression of opinion, she seemed scarcely prepared to believe it. I accordingly made an arrangement to operate, and stating that we would require some assistance, requested her to notify her family physician of the day and hour.

On the 26th of October, 1866, with the assistance of two of my colleagues, after administring chloroform, we performed the operation. Placing the patient on her left side, with a duck-bill speculum, and tongue depressor in the hands of my assistants, deeply introduced within and widely separating the walls of the vagina, the polypus was seized in a Museau's forceps, and with a blunt-pointed bistouri its pedicle incised as close as possible to the mucous surface which gave it birth. Some hæmorrhage followed, which was controlled by the immediate application of lint, moistened with the persulphate of iron, and the vagina plugged with dossils of lint. No torsion was performed. Slight hæmorrhage continued. At my next visit the dressings were removed, and another application of the styptic on lint arrested all bleeding. This dressing was allowed to remain for four days, when we were able to relieve the patient of all farther annoyance, and after the use of a few injections of tannin and alum she was cured.

The polypus measured an inch and a half in diameter, occupied the upper portion of the vagina very completely, was lobulated and pyriform of shape, with a well-formed pedicle. There was some development of cellular tissue, and vessels through a fibroid structure, and the growth had undergone no metamorphosis.

However much a growth of this size must interfere with parturition, of which it always constitutes a complication, it seldom forms an impediment to conception; but in this instance, contrary to what

I believe is a very frequent rule, it appears to have effectually prevented impregnation. The lady had abandoned all idea of this possibility for ten years, until a few months since, when I was obliged to assure her, that the symptoms of which she then complained were those of gestation. While I now write, my patient is in perfect health, expecting her approaching confinement.

Concluding this brief narration of facts, we have only added another illustration of the importance of an accurate diagnosis, in relieving a patient, at once, if not of a painful, certainly of a dangerous disease; since there can be little doubt of the influence of continued hæmorrhages upon the constitution, together with the possibility of such metamorphic changes of a malignant nature, to which growths of this kind are liable. Deaths frequently occur perhaps when the disease, erroneously considered cancerous, has really become such through time and neglect, for Bayle affirms that these tumours are present in twenty women out of one hundred who die after the thirty-fifth year of life. Twenty years experience with the operations of the dissecting room does not permit me however to subscribe to such an opinion.

An undissembled prejudice exists against *excising* a polypus, without securing the patient against hæmorrhage by ligaturing the pedicle. Even in growths of inconsiderable size, *torsion* is deemed indispensable, because constantly employed in much larger tumours with what is supposed to be correlative success. The ligature sometimes gives rise to uterine phlebitis, not to speak of the delay which its application causes in the operative procedure.

Excision, in this case, without torsion or ligation, offered the speediest relief; little trouble occurred, plugging controlled the bleeding, and the operation was reduced to the simplest expressions.

IV.—IODINE IN DISEASES OF THE MUCOUS MEMBRANES. By A. P. MERRILL, M. D., New York.

Having suffered from pharyngitis assuming a chronic form, and having resorted to the use of every known remedy for the disease without more than temporary benefit, I was induced several years

ago, by some experience of its action upon the mucous tissues, to try the effect of iodine as a topical application to the throat, and from this alone I obtained relief. After many experiments in my own case, and in many others of a similar character, I finally fixed upon the following formula as proper for general use, and which has been several times published in Medical Journals:

℞. Iodide of Potassium.....3j.
Iodine.....3ss.
Sugar and Gum Arabic, each.....3ij.
Water.....3j. Mix.

I have since continued to make this prescription for the disease with uniform benefit, and often with remarkable results; but it has occasionally become necessary to reduce the quantity of iodine to guard against too strong a pungency, and in a few cases this ingredient has been omitted, relying upon the iodide of potassium alone. Without this large quantity of gum and sugar, few persons can bear the mixture of sufficient strength to secure beneficial results, and I have not found glycerine, since recommended by some, to be a good substitute for these articles.

My method of application is, to use a camel's hair brush with a handle, which may be charged with a moderate amount of the mixture, and then passed deep into the throat, in contact with the diseased membrane, when the remedy will be distributed more thoroughly by repeated acts of deglutition. Before the use of this mixture in my own case, I had so far lost the use of my voice as to be unable to deliver lectures; but my throat was soon relieved by the treatment, and I subsequently lectured to a medical class for several successive years without experiencing any inconvenience from the disease. I have prescribed the mixture extensively for pharyngeal disease, and many public speakers and others have been relieved of this painful disease by its use. But frequently cases are met with in which the disease has extended into the trachea and the bronchi, beyond the reach of the brush. In one of this kind I found the patient inhaling the vapour of gum camphor through a quill, a practice said to be common in France, but without much effect. I added a few grains of iodine to the camphor in the quill, and then

the relief obtained from inhalation was decided. But in applying this combination afterward, I met with a difficulty in the liquefaction of the compound, and then determined to use each remedy separately, by placing a sufficient quantity in a small tube of cane, with a little coarse wad in each end to prevent the escape of the medicine. I have used tubes of glass also, but found them to retain the remedies less securely, on account of the smoothness of the interior surface.

The improvised cane tubes have answered an excellent purpose in my practice, whether employed through the medium of the mouth or nasal passages; but now I have substituted tubes made of hard rubber, which, besides being more elegant than the others, are so rounded at the ends as to prevent any irritation of the mucous tissues with which they may happen to come into contact, while the vapour escapes through several small openings, distributing it more effectually over the diseased surface. With these, as with the cane tubes, the tongue and mouth are protected from the disagreeable effects of the vapour, and the current of air may be made to impinge upon any point of irritation within reach, whether in the throat or nose. I have employed these inhalations of both the iodine and camphor vapour in many cases of pharyngitis, bronchitis, catarrh and coryza, with excellent effects; but it often happens that these membranous diseases exist and continue for a long while without any bronchial affection of sufficient importance to require the vapours to be applied below the glottis; and sometimes strong applications of iodine are required for the throat when the remedy is too stimulating for the bronchi. In all such cases the fluid mixture is to be preferred.

In chronic pharyngitis there is nearly always more or less of viscid mucus about the fauces, so adherent that it cannot be removed by coughing or other efforts to clear the throat; and this is to be specially observed when the victims of this disease emerge into the cold air of the street from crowded and heated rooms. Any one may without difficulty indicate every such case by the effect upon the throat of this sudden transition, and if the throat of such persons be examined soon afterward, more or less evidences of engorgement and inflammation will appear, and the follicles of the mucous

membrane will be found swollen and protuberant. The same effect is to be observed from the sudden reäction in these parts caused by passing from a cold to a warm atmosphere. In the nasal passages, and in the maxillary and frontal sinuses, there is also a secretion of viscid and adherent mucus producing a sensation of fullness and a thickening of the lining membranes, often nearly closing up these cavities. The effect of topical applications of iodine in such cases is, to cause a secretion of thinner mucus which disengages the viscid accumulations, relieving also the swallowing.

Benefit is also derived from the inhalations of iodine in the more acute affections of the nasal membranes, such as coryza, hæmorrhage and catarrh, and the effect is assisted by the use of tincture of iodine or other active rubefacient upon the outer surface of the nose. The common iodine bottle may be used for these nasal inhalations, and sometimes it is preferred to the inhaling tubes, but it is not an agreeable mode of inhalation by the mouth, because of the unpleasant action of the vapour upon the tongue. The habitual catarrh of old people is another affection much benefited by inhalation of iodine, and they are advantageous to public speakers and singers, whose vocal organs have become debilitated from excessive exercise in their vocations, and in which cases there is frequently a tendency to œdema of the glottis and aphonia.

My experience with iodine as a topical remedy, in diseases of other mucous tissues than those of the respiratory organs, has not been so extensive; but I have applied it to the external meatus of the ear, to the eustachian tube, and to the rectum and vagina, with good effects. In some of the diseases of these cavities, it may be better to employ the aqueous (Lugol's) solution of suitable strength, but the rubber tube which I have now invented is also convenient for these purposes, the vapour being the milder and more controllable form of application. The tube is used for these purposes by attaching a rubber bag to one end of it, for forcing a current of air through the deposit of iodine crystals. This plan of administration is also suitable to the nasal and pharyngeal diseases of children, and for such adult subjects as may be too feeble to make strong inhalations through the tube.

In some notices of my publications on the use of iodine vapour,

it was several years ago suggested by foreign Journals, that heat must be required to facilitate evaporation, but this is quite unnecessary, the crystals of iodine being sufficiently volatile in a current of cold air, to afford all the strength of vapour that can be conveniently borne by the patient. In many of the diseases of the mucous tissues, indeed, to which the remedy is suited, care must be exercised not to continue the application too long at one time. The same is true here as of the application of iodine to the skin, the excitation increases after being applied, and on this account the aqueous solution is often better for the skin than the alcoholic tincture; and for children the iodine ointment, freshly prepared, is generally better than either. Exceptions to this are proper in severe cases of croup or diphtheria, when there is sometimes an advantage in the more active tincture.

For convenience, safety and efficacy, we have few remedies more valuable than iodine topically applied to the mucous membranes and the skin, contraïndicated only in the acute stage of inflammation.—Indeed, the pharyngeal membrane will bear the application of iodine, when it is red hot, and swollen, for there is no other part of the body which so well bears stimulating applications in inflammatory affections as the throat. I have used topical applications of iodine in croup, in diphtheria, and in œdema of the glottis and lungs, with better effects than other local remedies; but I have not found them so efficacious in phagedenic ulcers of the throat, as the sulphate of copper and the nitrate of silver. I am confident that iodine will be made useful also in diseases of the mucous membranes of the bladder and urethra, and more especially in those of the rectum and vagina.

In the Southern States, where I resided for nearly half a century, a large proportion of the mortality from consumption, so called, has its primary cause or condition in pharyngitis. This pharyngeal disease is in many places very prevalent In general it is a disease of slow progress and becomes chronic. It is far from being always fatal in its results; and, indeed, many persons suffer with it for nearly a whole lifetime without any serious bronchial or pulmonary disorder. But under the influence of evil habits of life, and especially in subjects with a hereditary tendency to tubercular and scrofulous diseases, and with a deficiency of nervous tone and vigor,

this disease, from whatever cause it may arise, is apt to extend its morbid character to the bronchial tubes and the lungs, developing tubercular phthisis in predisposed subjects, or resulting in chronic bronchitis, culminating in ulceration and destruction of tissue, and in either case ending sooner or later in death. Many of these cases may be successfully treated in their early stages with iodine, and the topical application of this remedy is assisted by its internal use. For this latter purpose I have found Lugol's solution more active and useful than the iodide of potassium by itself.

ECLECTIC DEPARTMENT.

"Floriferis ut Apes in Saltibus Omnia Limant."—Lucret.

I.—Gonorrhœal Rheumatism.

Fournier believed in the specific nature of blenorrhagic rheumatism.

1st. The blenorrhagia, or more properly the urethral affection, is not only the occasional cause of rheumatism; it is the efficient, direct, necessary cause. 2d. The articular or other complications of blenorrhagia are very different from simple rheumatism, very different as to symptoms, as to localizations, as to evolution as to possible complications, as to future consequences, and hereditary transmission, etc., whence can be inferred an essential difference between these two maladies.

The following characters distinguish them from each other: 1. The recognized and established cause of an attack of simple rheumatism is the influence of cold, or of a rheumatic diathesis. From personal researches, M. Fournier affirms that cold or moisture are absolutely foreign to the manifestations of blenorrhagic rheumatism: nor has an hereditary or acquired arthritic diathesis any more influence. The cause of these manifestations is the blenorrhagia, and we see patients who, independently of any preceding cause, have rheumatism with each new blenorrhagia.

2. The symptoms offer differences not less marked. Blenorrhagic rheumatism is oftenest apyretic, or if there should be fever, it is less intense, less persistent than in simple rheumatism; it is neither accompanied with the profound depression, nor with the sympathetic phenomena which are observed in acute rheumatism. Blenorrhagic

rheumatism is quite often mono-articular, or at least it is never generalized over the system to the same extent as simple rheumatism; often it is almost indolent, or quite in character with a true arthritis it is exceedingly painful; it is much more fixed; it does not offer those sudden or rapid *delitescences*, frequent in common rheumatism; solution takes place with greater difficulty, and often leaves behind a hydrarthrosis which is rare in the last; finally, the blood does not present the buffy coat so constant in acute simple rheumatism.

3. The complications in the great serous membranes, which simple rheumatism develops, are as rare, as exceptional as possible in blenorrhagic rheumatism.

In return, this has a very serious localization, which fails in simple rheumatism: it is ophthalmia, not that which results from the contamination of blenorrhagic pus, but that form known as metastatic, or from internal cause, essentially benign in comparison with the preceding, almost always affecting both eyes, and passing from one to the other with remarkable mobility. In forty-five cases, M. Fournier has observed seventeen in which there was association with articular symptoms.

The evolution, the duration, the termination of the two maladies equally differ.

As to treatment, while general remedies succeed best in simple acute rheumatism, on the contrary, in blenorrhagic rheumatism local means, (local blood-letting, blisters, painting with tincture of iodine, absolute immobilization, etc.,) are efficacious.

Finally, recurrences are very frequent in each disease, but under very different conditions. Simple rheumatism recurs under causes the same as those which have produced a first attack: cold, moisture, etc., or from constitutional disposition. Blenorrhagic rheumatism, on the contrary, repeats itself only as the result of a new blenorrhagia.

From the establishment of these differences, both numerous and radical, continues M. Fournier, I believe myself authorized to conclude: 1, that a blenorrhagic rheumatism is not a simple rheumatism supervening as an incident in the course of a blenorrhagia; 2, that it has its own individuality, and ought to be distinguished nosologically from simple rheumatism.

If in certain complex and difficult cases there appear to be strong analogies between the two diseases, in its pure and simple forms, blenorrhagic rheumatism has a physiognomy so peculiar that it is recognized at once by the practitioner of a little experience.

After having thus presented the different arguments which demonstrated, in his opinion, the specific character of blenorrhagic rheumatism, he next inquired if the name given it represented the true idea we should have of the disease.

The name *rheumatism*, because consecrated in medical language, should be preserved, and in addition, blenorrhagic rheumatism is a special mode of this complex morbid state called rheumatism. As to the term *blenorrhagic*, when we consider that this term is badly defined, and has been applied to affections very different from each other: and that, on the other hand, rheumatism far from manifesting itself indifferently in all diseases called blenorrhagic, is never observed but with a urethral blenorrhagia, it would seem essential that the urethra must be involved in order that the rheumatismal manifestations should be produced.

Comparing, then, these accidents with those which simple excitation of the urethra can cause, such as intermittent febrile paroxysms, suppuration in different parts of the body, arthritis even, M. Fournier thought that the rheumatism called *blenorrhagic* could be a manifestation of the same sort, and like them be a reflex phenomenon of urethral irritation. It was less a *blenorrhagic*, than a *urethral* rheumatism; the author proposed the adoption of this name.—*Western Journal of Medicine.*

II.—On Bromide of Potash in Acute and Chronic Affections of the Testis. By Bedford Brown, M. D., Washington, D. C.

The action of bromine as a therapeutic agent appears to partake both of a general and local, or rather of a specific character. The known general influence which it exercises over certain organic operations of the system is mainly due to a peculiar power of sustaining the process of general nutrition in a healthy state, and of correcting many abnormal deviations from that process. In addition to these more general alterative properties, bromine possesses remarkable sedative powers over the nervous system, without many of those serious effects resulting from more powerful narcotics.—This gives it additional value in the treatment of the diseases of organs having such varied and extensive nervous communications as the testis. An experience in its use of nearly ten years convinces us that, in addition to these properties, it has a very decided specific effect in diseases of the entire genito-urinary system.—Furthermore, this local *specific* power partakes both of an alterative and sedative character. It is designed here to convey the impression that this sedative power is not confined simply to the nervous structures of this system, but is applicable to the special functions

of the organs themselves, particularly the generative. That unavoidable stimulus arising from the specific function of an organ, even when not actively exercised, the peculiar erethism given to the circulation and innervation of the parts in disease, must ever constitute a serious difficulty in the way of treatment. The exercise of the function of vision in affections of the eye, and of digestion in the diseases of the stomach, afford difficulties familiar to all. So in affections of the female uterus and the male testis, the generative functions, and peculiar erethism associated with them, present serious obstacles. Hence the presence and exercise of specific function must always constitute an important element in the causation and perpetuation of the diseases of the particular organ to which they belong. To be able to quiet the injurious excitement peculiar to the generative organs by agents which leave no permanent impression, until morbid action passes away, is a matter of no insignificant moment. Indeed the influence exerted by the excitement of peculiar function may be said to give much of that complicated character and intractability to the diseases of the generative system. Bromine appears to possess this peculiar property in an eminent degree. The action of bromine in ovarian affections displays these triple properties (alterative, sedative, and local specific powers) in a striking degree. In a case of singular form of hysteria, in a young female of exuberant health otherwise, and in the early periods of puberty, which was clearly attributable to engorgement and subacute inflammation of the ovary, the bromide of potash given freely not only relieved the local ovarian and uterine symptoms, but gave permanent relief to the annoying hysteria. In affections of the testis, indeed of the generative organs generally, there is established a remarkable but distressing association of nervous sympathy, not only between themselves and their varied relationships, but with the entire spinal marrow and brain. The prompt action of bromine on the two great nervous centres, the brain and the spinal marrow accounts in some measure for the sedative influence exerted by the agent on these distressing sympathetic symptoms arising during disease of the generative organs. Hence the influence of bromine as a sedative is not confined to the testis, ovary, or uterus, but appears to diffuse itself over a considerable range of kindred organs of the pelvis which are supplied by nervous and vascular elements from a common source. Here may be observed a striking instance of its action on a class of organs having strong and close nervous sympathies, though differing materially in function. Affections of the spinal cord, and of the genito-urinary organs have long been known to occupy peculiar intimate relationships, and as having strong *reactive* influences in disease. The conjoint influence exerted

by bromine on the important system of genito-urinary organs, and their peculiar sympathies alluded to, includes its power over the male and female bladder, the prostate gland, the urethra in a state of functional or organic disease, so that in all of such affections it becomes a valuable remedy. In urethral strictures attended with undue irritation, inflammation of the bladder and its neck, enlargement of the prostate gland, these peculiar properties are manifest; and when success is not complete, much relief is afforded. Much of the specific influence is attributable to its sedative action on the lower portions of the spinal cord. All practical physicians appreciate that extensive chain of nervous sympathies and associated phenomena pervading this class of organs, in both male and female, when one or more of their kindred are diseased. Now, under these circumstances, bromine exerts a prompt influence, through the medium of the spinal cord, on all these sympathetic phenomena.—These preliminary remarks are necessary to a proper appreciation of those which are to follow on the treatment of affections of the testicle by means of bromine and its preparations. The sedative action of bromine is rather of a *harmonizing* character, never exciting inordinately one organ, or set of organs, while depressing the tone of others, or correcting the functional delinquencies of one at the expense of another; maintaining rather a universal system of organic coöperation essential to healthy action. Some years since, after a favourable experience with the use of bromine in some kindred affections, we determined to test the powers of the remedy in organic affections of the testis. It was very fairly tested in the three principal forms of organic diseases of these organs, viz., acute inflammation, chronic enlargement, and that class presenting scirrhous characters. The following cases comprise a succint statement of the treatment and results of these three forms of affection:

Case 1.—A man, aged fifty, originally of robust health, but more recently presenting symptoms of functional affection of the kidneys. After a rather severe acute inflammation of both testicles, of two weeks' duration, purulent matter accumulated extensively in the vaginal sac of one side, and finally made its escape by ulceration. Subsequent to this, the case assumed a very serious form, presenting positive indications of scirrhous degeneration of both testicles. Both organs, while considerably increased in volume, were disproportionately increased in weight. They were so thoroughly nodulated and indurated as to impart the sensation to the touch of stony hardness. The epididymis of each testicle participating in the morbid process, imparted the sensation, through the scrotum, of distinct, bony formations. The pain experienced was not constant, but of a lancinating character, and when present, of a distressing

nature. The general health indicated a decided tendency to sympathise, and assume a cachectic type. Hitherto the case had been uncontrolled by all methods of treatment. The patient now commenced the use of bromide of potassium in doses of x grs. three times daily, subsequently increased to ℈j, as an experiment under desperate circumstances, from which something favourable might be hoped. After the tenth day there were encouraging indications to persevere. At the fourth week of administration the signs of improvement were positive. From this time, during the four months which the patient continued to use the bromine, the improvement was progressive, until every vestige of disease had disappeared.—There was a gradual reduction of volume and weight, diminution of pain, and absorption of indurated exudation.

Case 2.—A man, aged forty years, had been suffering for more than twelve months with enormously enlarged testis, attended with much distressing pain in the organ, spermatic cord, and lumbar region. Patient commenced the use of the bromide of potassium in ℈ doses, three times a day, and continued the remedy for five months. During the treatment the diseased organ lost more than two-thirds of its volume, but did not entirely regain its original size; but the pain and inconvenience having so far subsided, the patient concluded to discontinue the treatment. The patient informed me also that, during this time, upon any accidental suspension of the remedy, a return of the pain and uneasiness was sure to enforce a resumption.

Case 3.—A young man had a violent attack of orchitis, following gonorrhœa of two weeks standing, from which he had suffered much pain and annoyance, depriving him of rest both day and night.—After the operation of a brisk cathartic, he took ℥ss of bromide of potash three times daily, in connection with hot water applications to the diseased organ, applied profusely and repeatedly. The earliest effect of the remedy observed was the positive diminution of pain, and much relief to those annoying sympathetic phenomena attending. This peculiar feature of the action of bromine in the most of cases has attracted my attention so positively as to cause me to distinguish it by the term *brominism*. This is the saturation of the system with the agent to a point when the pain of inflammation is relieved, and nervous irritation and restlessness quieted.—The patient continued the treatment for a period of two weeks, when he was completely relieved. I wish to refer here to the influence of bromine on those distressing sensations of *weight* and *dragging* of the spermatic cord, pain and uneasiness in the lumbar and sacral region, associated with enlarged testicle. These peculiar symptoms, separate from mere mechanical causes or influences,

must be very much due to the reflex functions of the cord. Both the afferent and efferent nerves of these organs must have a common point or centre for *insertion* and *origin*. The prompt action of bromide on the spinal cord, and on various nerves arising from the lower portion of the cord, and abundantly distributed to the genito-urinary organs, accounts for much of its treatment of the diseases of that associated system apart from any mere alterative powers.—There is much reason for believing that the influence exerted over the peculiar nervous phenomena of these organs is due to a primary action of the agent on the great nervous centres alone, particularly on that of the spinal cord. The action of bromine, indeed, on these latter structures, and its reflection thence on the functions of important organs, furnishes suggestions of peculiar interest.—*The Medical Mirror.*

III.—Differential Characters of the Chancre. By MM. Bellehomme and Martin. (*St. Louis Med. & Surg. Journal.*)

Indurated Chancre.	*Soft Chancre.*
.1 There is an incubation, of which the average duration is fixed at 25 days.	1. There is no period of incubation.
2. It arises from the contagion of an indurated chancre, from suppurating, secreting secondary lesions; sometimes from the blood of a patient affected with syphilis in the secondary stage.	2. It arises from a simple chancre or a chancrous bubo.
3. It is more frequent solitary.	3. It is most frequent multiple.
4. It is not inoculable to the person who has it, or to a person with constitutional syphilis.	4. It is inoculable without end to the person who has it, or to any other person. The pus of the suppurating bubo is only inoculable when it is a chancrous one.
5. It does not commence by a vesico-pustule, but by a simple excoriation, and in some cases by a papilla.	5. It commences by a vesico-pustule.
6. In the period called the *state*, the indurated is presented	6. In the period called the *state*, the soft chancre is pre-

Indurated Chancre.	*Soft Chancre.*
under the form of a superficial ulceration with inclined borders; this ulceration is covered in part by a false membrane; the borders are of a bright red; the form of the ulceration is generally regular; it suppurates very little.	sented under the form of a tolerably profound ulceration, the bottom of which is filled with a kind of organic detritus mixed with pus. The borders are perpendicular, and separated on the edges from the subjacent tissues.
7. The indurated chancre is rarely painful.	7. The soft chancre is almost always painful.
8. The indurated chancre is accompanied 98 times in 100 with induration of its base, elastic and chancroid in its character, not having any of the inflammatory induration.	8. The soft chancre is accompanied in some cases with an inflammatory induration, but never with the specific induration.
9. The neighbouring lymphatic ganglions of the indurated chancre becomes indurated, and give those polyganglionic adenophymata, which are chancroid and indolent, without any tendency to suppurate.	9. The soft chancre is often accompanied by phlegmonous lymphatics. The bubo suppurates, and furnishes in some cases an inoculable pus.
10. Not much local reäction; it has a tendency to cure itself; very rarely becomes phagedenic; it is regular in its course.	10. The soft chancre is a tolerably grave local lesion. It has a great tendency to ulceration; very irregular in its course; does not tend to heal of itself like the indurated chancre. It is relatively very frequently complicated with phagedena and gangrenous state.
11. The indurated chancre is the first apparent manifestation of the syphilitic diathesis; it is therefore the sign of general infection of the economy. Frequently before its cicatrization the first manifestations of the secondary stage come to light, such as roseola, etc.	11. The soft chancre is purely a local accident.
12. It is peculiar to the human family.	12. It is transmissible to animals.

IV.—On the Various Risks of Operations. By James Paget, F. R. S., (delivered at St. Bartholomew's Hospital.

Questions of importance, and yet of great difficulty, arise in the cases of many who may not be called diseased, but who certainly are not in any just sense of the word healthy, such as the plethoric, the over-fat, the intemperate, the over-fed, the feeble, the degenerate, the cold-blooded. What can be safely said about these, and of the dangers they severally incur when we wound them? I will try to tell what I believe.

Phethora, pure and simple, is not a bad condition for operation. So far as I have seen, people that have been full-blooded, ruddy, warm, round-limbed, tight-skinned, with strong hearts, and, as we suppose, a rather excess of blood, have done well. But such people must be carefully managed; not fed too well: not kept too long in bed; not allowed to retain their refuse; and mere bigness must not be taken for plethora.

For the over-fat are certainly a bad class, especially when their fatness is not hereditary, but may be referred in any degree of their over eating, soaking, indolence, and defective, excretions. The worst of this class are such as have soft, loose, flabby, and yellow fat; and I think you may know them by their bellies being pendulous and more prominent than even their thick, subcutaneous fat accounts for; for this shape tells of thick omental fat; and I suppose, of defective portal circulation. I know no operation in which I more nearly despair of doing good than in those for umbilical hernia or for compound fractures in people that are over-fat after this fashion. Nothing short of the clearest evidence of necessity or of great probable good, should lead you to advise cutting operations in people of this kind. Do lithotrity for them rather then lithotomy: incline against amputations for even bad compound fractures; and, wherever you can—as, for instance, cutaneous cysts, hæmorrhoids, and the smaller examples of scirrhous mammary cancers—use caustics rather than the knife or ligature.

All these warnings must be doubled for the intemperate. One does, indeed, sometimes meet with habitual drunkards who pass safely through the perils of great operations; but these are rare exceptions to the rule, according to which one may reckon that the risks of all operations increase with the increasing degress of habitual intemperance. I think you will find that a habit of slight intemperance is much worse than occasional great excesses; that regular soaking is worse than irregular carousing; probably because of the steady

impairment of the blood and of all the textures to which the soaking leads. Of course you will keep your hands off notorious drunkards, unless you are driven by the stress of a strangulated hernia, or a stopped windpipe, or something leaving you as little choice as these do. But you must be on your guard to detect a good deal of drunkenness of the soaking kind which is not notorious and not confessed. Be rather afraid of operating on those, of whatever class, who think they need stimulants before they work; who cannot dine till after wine or bitters; who always have sherry on the sideboard; or are always sipping brandy-and-water; or are rather proud that, because they can eat so little, they must often take some wine.—Many people who pass for highly respectable, and who mean no harm, are thus daily damaging their health, and making themselves unfit to bear any of the storms of life.

On all such as these, operations are more than doubly hazardous. Of course you may hear of wondrous escapes from dangers, and on the credit of a few exceptions, silly proverbs are made about the impunity of drunkards; but the general rule is certain. Every risk of an operation is increased in the habitually intemperate; they are, above the average, liable to every one of all the scources of danger and of death.

I have had no sufficient experience among teetotalers to enable me to speak with any certainty of their capacity for bearing operations. I cannot doubt that a patient trained all his life, to habits of rigid temperance would bear injuries of all kinds better than the average of men; but people of this sort are not commonly those with whom you have to do under the name of teetotalers. These are, much more commonly, such as have been intemperate, or, to say the least, imprudent, in their manner of living, and have then wholly changed their habits, and lived without any stimulants whatever. Of such people I have no good opinion when they come to be the subjects of surgery; for they seem to retain the bad liabilities of the intemperate long after they have given up their bad habits. I would not adopt the opinion that I have heard some express, that teetotalers are worse patients than drunkards; but I should always expect that a very long period of reformation would be required to free a man from the damages he has sustained by intemperance.

Over-eating is not commonly supposed to lead to any such risks of life as over-drinking does; yet I believe that you will find, in operative surgery that among the habits that increase the risks of life, this may stand not far off drunkenness, especially if the over-eating is of meat and other nitrogenous foods. I am led to believe this from several cases that I have observed, and I think that there are

large evidences of it. You know that the general results of operations in provincial hospitals tell of a smaller mortality than in the hospitals of London and the largest towns. The difference is commonly ascribed to differences in the purity of the air, and other advantages of that kind in the comparatively rural districts. I believe that much more of it is due to the differences of habits in the several classes of patients. The differences are many; but one of the chief of them is that the poor in the agricultural districts eat far less meat than those in large towns do, and are, by comparison, less fed, though probably not worse fed; and you may frequently observe that patients who come to us from agricultural districts bear operations in all respects better than Londoners who are submitted to the same proceedings. Of course many things concur to make the differences of constitution between a town and a country population; but I am satisfied that among these things a very potent influence is exercised by the differences of diet. And the differences that we may thus see are strongly illustrated by what one hears of the results of operations upon the natives of India and other Eastern countries, whose diet is almost exclusively vegetable. Almost any amount of injury may be inflicted on them, and not be followed by the destructive mischief which occurs in Europeans under the same circumstances. They are defective, it is said, in healing power; but they recover with comparative certainty, however slowly, from operations of the greatest magnitude. A common expression about them is, "You can't kill them."

There are many patients to whom you cannot assign a morbid constitution, but who are feeble in all their processes. No organ, it may be, works wrongly; but no organ works with due power. Many children are in this condition, and some adults, whose condition has been admirably protrayed by Dr. Chambers in his book on Italy. They are not always bad subjects for operation. Repair will probably take place in them as feebly as any other vital process; but I believe they are not particularly liable to the disease after operations from which the greatest risks arise. Children of this class you should be cautious of operating upon for hare-lip or other such defects as do not urgently require interference; and in adults, if you can defer operations to some period of better health, you should do so; but all this for fear of local failure rather than of incurring any unusual risk of life. For in the management of these, as of all cases, you will find that the chief vital risks of operations are not through mere defects of power, but through diseases. The measure of danger is not in the proportion between more or less vital force, and more or less of exhaustion, but in the amount of liability to real diseases of the blood and tissues.

You often hear me speak of patients as "cold-blooded." I do not know that the whole of their blood is less warm than that of ordinary persons, but some of it is, for their hands and feet are seldom or never naturally warm; and some of them feel, when you touch them, as cold as reptiles in the same climate—their hands and feet feel as moist and damp as toads and frogs. The circulation in all these cold parts is of course very slow, and probably it has not a due velocity in any of their textures; for, wherever you can see vascular parts in them, they are of duller tint than they should be, dusky, and with a purple hue rather than a rosy one; and with these signs you find small pulses, and general indications of slowness in all vital processes. They digest slowly, and are very prone to constipation; and the women amongst them menstruate disorderly, and are liable to headaches and backaches, and a variety of nervous symptoms. People of this kind are so numerous that you will do well to look out for them among your cases, and to treat them especially with iron, with particular regard to this cold-bloodedness and slowness of life. They are not bad subjects for operations; rather, I should reckon them amongst the good ones; for they have always seemed to me singularly little liable to fall into the troubles of erysipelas, or pyæmia, or any other disorders of the blood: and the healing of their wounds is apt to be interrupted. Observe their defects; minister to them with warmth and good food, but not high stimulants or great eating, and they will do as well as any you will have.

And, to finish this account of the influence of diseased, or disorderly constitutions on the results of operations, let me tell you of the people that are commonly called "nervous." I do not refer to those with manifest disease in any part of their nervous system, but to those that are exceedingly sensitive, mobile, and excitable, whether in their sensitive or motor organs—who are very emotional, and with their whole cerebro-spinal nervous system altogether too alert. You will find them and their friends always apprehensive of the results of operations; they will tell you that they are so nervous they can bear no shock; and they look with the greatest apprehension upon the inflictions of any injury. All this is fallacious. You may be surprised at observing how very little influence upon their organic processes this excessive vivacity of their cerebro-spinal system exercises. Time after time I have found patients who have complained of agonies in their wounds, and I do not doubt have felt them, but whose pulses have been unmoved. They have had enormous pain, but no fever, no single sign of disturbance of their general nutrition; they have had spasmodic movements of their limbs, tremblings, and rigors, but no mischief

has followed. Besides, the same mobility of mind which makes these patients very fearful before an operation makes them hopeful directly after it; and amongst all the people that can in any sense be called invalids, I know none who more generally pass through the consequences of operations with impunity than do those who are commonly called nervous, and whose nervousness consists, if I may use the expression, in too great a vivacity of the whole cerebro-spinal system.

Sometimes you may be forced to operate during the continuance of an acute disease; and although the circumstances of the case may give you little choice as to whether you should operate or not, it is well to be aware of the degree in which the acute disease may influence the result of your proceedings.

Patients with ague bear operations as well as others of the same class; but, in the course of their recovery, they may alarm you by having one or more ague-fits, exactly resembling those that precede pyæmia. And more than this: if a patient has ever had ague, and, even many years afterwards, you perform an operation on him, ague may seem to be renewed in him at some short time after the shock, or loss of blood, or whatever other damage he may have sustained. I have so often noticed this, that whenever I hear of severe rigors following on any operation, I ask for a previous history of ague; and I have sometimes found that the patient has almost forgotten it in the long lapse of time since he suffered from it.

The question of amputation often arises when the patient is suffering with erysipelas, or with that spreading inflammation, of the cellular tissue which is closely akin to erysipelas. I have often said to you that I look upon a secondary amputation as a confession of either a mistake or a disappointment. Either a primary amputation ought to have been done, and by mistake it was left undone; or if for any apparently sufficient reason it was not done, the necessity of doing the secondary amputation implies the disappointment of just hopes. I have spoken with this disparagement of secondary amputations because the necessity for them is so likely to come, when the probability of success is reduced by the operation being performed, while the patient is in acute disease. I cannot tell you the numerical increase of risk; but I believe that the mortality after amputations during erysipelas, or spreading cellular inflammation, would be found very much greater than that of primary amputations, or of secondary amputations done for mere wasting suppuration or irreparable local damage. I scarcely know any set of cases in which I have operated with less hope than in those of compound fracture, or similar injuries, in which the question is raised whether a patient, who seems dying with acute disease, may have what is

called a chance of his life by amputation. In the large majority of such cases the chance by operation seems to be less than that of keeping the patient alive by the ordinary treatment of erysipelas, or whatever other acute disease he may be suffering with.

What are the chances of recovery from operations done during pyæmia? I think I can answer safely, that in acute pyæmia in which the patient has rigors once or more in a few days, and profuse sweatings, with very rapid pulse and breathing, and with delirium, and rapid wasting, or with dry tongue and yellowness of skin, or any considerable number of these symptoms, the probability of good is so small, and of harm so great, that you should refuse to operate. But in chronic pyæmia, when the disease requiring operation adds largely to the exhaustion from which the patient is suffering, the removal of the disease may be very proper. Suppose, for example, a patient with a crushed foot or a crushed hand, in whom signs of acute pyæmia have recently appeared. Whatever be the state of the injured part, I would not add the damage of an amputation to the burden that the patient already has to bear. But if the pyæmia have become chronic, attended with only wasting and sweating, and the formation of abscesses here and there, and if the injured part be manifestly useless, and a scouce of irritation or of exhaustion, the mere existence of pyæmia in the chronic form would not turn me from the operation required by the part.

The occasions for operating in any other than these acute diseases are not many, but in diphtheria or croup you may have to perform tracheotomy, and during peritonitis a hernia may require operation. These are all cases of necessity, and their results are not materially affected by the general acuteness of the disease. If their local good is accomplished, the healing of the wound and the recovery of the patient may occur as in any ordinary case, unless, in deed (which I have never seen), a wound after tracheotomy should itself become diphtheritic.—*Lancet.*

V.—GENERAL RULES FOR DIAGNOSIS AND TREATMENT OF DISEASES OF THE HEART. By DAVID WOOSTER, M. D.

RULES FOR DIAGNOSIS.—1st. If the patient, otherwise in good health, complain of uneasiness in the præcordial region, cardiac disease may be suspected.

2. If a murmur be heard at the base, systolic in time—that is, with the first sound of the heart which diminishes in intensity as

the ear is moved toward the left nipple, it indicates roughness of the aortic orifice.

3. If a systolic murmur be heard at the præcordia, and if it increase in intensity as the ear is moved toward the left nipple, and diminish as the ear is moved up the sternum, it indicates *mitral regurgitation*—that is, insufficiency of the mitral valve.

4. A murmur heard at the base of the heart, (about the junction of the third ribs with the sternum) thence down the sternum, coincident with the *d'stole* (second sound of the heart), indicates *aortic regurgitation*. If to this sign be added visible superficial pulses, and a hammering pulse at the wrist, aortic regurgitation is certain.

5. A murmur coincident with the second sound heard about the left nipple, or in the fifth interspace below and to the right of the left nipple, and along the heart toward its base, and nowhere else, indicates mitral constriction. [This murmur is very rarely heard.] If to this be added a slight cough, the lungs being sound, and hypertrophy of the right ventricle—mitral constriction is indubitable.

6. A murmur heard loudest above the base of the heart in the upper part of the thorax, indicates aneurism of the aorta, innominata, or subclavian artery. If to this sign be added a pulse of unequal strength in the two wrists, or absent in one wrist, aneurism is almost certain. Difficulty of deglutition and paroxysms of dyspnœa add greatly to the probabilities of aneurism; indeed, with the preceding signs, render it indubitable.

7. If there be a bulging of the left side, near the mid sternum, and heaving impulse of the heart, and strong, full pulse, there is hypertrophy of the heart.

8. If there be a visible undulatory impulse, or heaving of chest, if the pulse be not strong nor very resistant, if the first sound of the heart be clear and more distinct, and seem nearer to the ear, and have more of a knocking character, there is *dilatation* of the heart. If there be much bulging of the interspace, and if the pulse be strong enough for hypertrophy; if the apex be outside of the left nipple and below the sixth rib, there is hypertrophy with dilatation. If there be also dropsy of the lower extremities, the probabilities of dilatation become certainties.

9. Basic murmur, coincident with first sound heard loudest at the junction of the third costal cartilage with the sternum, and thence down the sternum, attended with persistent and jugular pulse, indicates almost positively tricuspid regurgitation—insufficiency of of the tricuspid valves: if to these two signs general turgidity of the venous system be added, tricuspid regurgitation becomes certain.

10. An endocardial murmur, whether systolic or dyastolic,

whether at the base or apex, heard suddenly during course of an acute rheumatism, or after a violent blow on the præcordia, or during Bright's disease of the kidneys, indicates endocarditis in the most positive manner.

11. An attrition or friction sound heard over the præcordia—that is, over the fifth left costal cartilage, while the patient holds his breath, indicates pericarditis in the most positive manner.

12. Softening of the heart, without fatty degeneration, occurs only in cases of asthenic or adynamic diseases of an inflammatory nature. If in such cases the pulse grows feeble out of ratio with the intensity of the adynamic disease—for example, a typhus or typhoid fever—and remains weak and unequal, become easily excited and fluttering, if at the same time the patient feel steady præcordial uneasiness, softening, of the non-fatty variety, is extremely probable.

13. If the same symptoms mentioned in the foregoing rule be observed in a *bon-vivant* of luxurious and idle habits, especially if he be at the same time an intemperate drinker, fatty degeneration of the heart is almost indubitable. If to these symptoms be added epileptiform seizures, and if the respiration varies greatly in uniformity as to frequency and force without any external cause, and at the same time the patient be over forty years old, fatty degeneration may be considered certain.

14. *Angina pectoris* can not be mistaken if the suffocation, præcordial pain, the dread of imminent death, having once occurred, so as to be described by the patient in these or similar terms, without having been questioned by the physician. The symptoms pertain, in their clearness and pertinence, to no other affection.

15. A murmur coincident with the first sound heard at the base and propagated up the aorta, in an anæmic person, whose blood under the microscope exhibits defect of red or excess of white globules, is an unorganic murmur, and indicates merely altered condition of the blood, or altered dynasium of the heart.

PRINCIPLES OF TREATMENT.—1. The first and most important principle to be kept in view in treating a diseased heart, is to diminish the labour it has to perform.

2. This is done in two ways; Directly, by diminishing the amount of blood in the body; by diminishing the functional activity of all the organs not concerned in secretion, and by increasing the functional activity of the skin, liver, kidneys, lungs and alimentary canal.

3. Blood may be abstracted directly, either from the arm by venesection, or from the præcordia by cups, when from general plethora or overwhelming local congestion, a sudden diversion to

the blood-current is deemed essential; or the total quantity of blood in the system may be dimished by reducing the weight of the body—the loss of eight pounds of weight is the loss of one pound of blood. Blood never is to be taken with a view of cutting short an inflammation, or curing either an acute or chronic affection, but merely for the purpose of relieving an urgent symptom, or arresting an imminent catastrophe. On the other hand, bleeding is not so hazardous as many would wish us to believe. If the digestive organs are unimpaired, loss of blood by hæmorrhage is restored with astonishing rapidity. In this respect, anæmia from traumatic hæmorrhage or venesection is widely different from pathological anæmia, depending on lesions of nutrition, assimilation and innervation; in short, on lesions of all the organs of the body.—Blood deterioration in this case is repaired with extreme slowness, and this is not to be used as an argument aginst venesection, leeching or cupping. A few pints of beef tea will restore as many red globules as are removed by a copious bleeding.

4. So local bleeding, even in anæmia of slow growth and long duration, is not always objectional to mitigate a threatening local symptom. For example: take a case in another department of pathology. A child of six months, more or less, badly nourished, with insufficient mother's milk and cow's milk, and farinaceous mixtures, has chronic diarrhœa. If in the course of treatment we intentionally diminish without arresting the diarrhœa, the child now has tonic spasm o the fingers and toes, the eyes pitch back under the brow, or look straight onward, seeing nothing; it rolls its head and moans, and starts with sudden shrieks. The child is anæmic, very pale, waxy almost, but its head is burning hot. Now, if a single leech be applied at the anterior fontanelle and allowed to fill, and after it drops off the bleeding be encouraged by the application of compresses wrung out of hot water, not only over the bite, but over the whole top of the head, for the space of a whole hour; if this be done within the first twelve hours after the tonic spasm becomes manifest, the chances are more than two in three the child will recover; providing it be nourished with beef juice, and medicated solely with minute doses of creasote subsequently, and kept warm at the abdomen and extremities. Now, this is a case in which an apology is needed: yet, I have bled in twenty recorded cases in this manner, and in seventeen have had the satisfaction of seeing my little patients recover.

5. As a general rule, depletion by bleeding is not required in diseases of the heart.

6. By abstinence from hard labour, mental or physical; by abstinence from all severe exercise, and by avoiding all violent emo-

tions or passions, the demands of the heart are obviously lessened, and hence its labours are lightened.

7. By aperients regularly taken, by diuretics often repeated, by hepatic stimulants taken from time to time, by unobstructed access to the atmosphere at all hours of the day and night, by baths, frictions and abundant passive exercise, the functions of the liver, skin, lungs, kidneys and alimentary canal are certainly increased, and that not in a way to be detrimental to alimentation, assimilation and nutrition.

8. Whatever degree of sedative impression we desire to make on the heart, must be made slowly, not suddenly. A violent blow on the pit of the stomach will stop the heart forever. A thousand light blows or a heavy weight would produce but little effect. Small doses of cardiac sedatives, often repeated and carefully watched, are better than large ones however judiciously administered.

9. The quality of the blood must be maintained as near the normal standard as possible, while its quantity may be diminished by restricted diet, and certain evacuants, in proportion as the disease of the heart advances.—*Canada Medical Journal.*

CLINICAL RECORDS.

"Ex Principiis, nascitur probabilitas: ex factis, vero veritas."

Aneurism of Femoral Artery and Treatment. By A. F. Schulze, M. D.

D. O'C., a private of 10th La. Infantry, aged 47, of nervous temperament, in the Fall of 1862, was injured by the rebound of a cannon, the carriage of which struck him behind against right hip, producing severe pain: he was sent to a general hospital. The pain never abated, and he, being thereby unfitted for service in the field, was detailed and assigned to this post for Hospital duty in August, 1863. Since then he has at times suffered so much pain that he could not obtain rest for many nights in succession. He first came under my care on the 29th of November, 1864, when I made an examination with the following result: The pain he referred to the distribution of the crural nerve, especially about the

knee. Said he suffered most at night while in a recumbent position, and that he had to get out of his bed into an erect position a dozen times during the night to obtain relief; that he has felt a pulsating tumour in the right groin as long as a year ago. I found that he could not bear to have the thigh extended upon the pelvis—it caused great pain, whilst drawing the knee against the chest afforded relief. I found, resting close against Poupart's ligament, an aneurismal tumour of the femoral artery of the size of an ordinary walnut; it had all the characters of a true aneurism.

On the 30th of November, 1864, at 2½ P. M., I instituted digital compression of the external iliac artery against the ilio-pectineal line; the pulsation was thus easily controlled. I selected eight hospital attendants, formed them into reliefs, and caused them to compress the artery without intermission. The force of the pulsation in tumour had become lessened at the end of forty-eight hours, but did not dimish after that time, and on Dec. 3rd, at 12½ P. M., I desisted from the attempt at cure by that means. The force used in the compression was only sufficient to control the pulsation of the tumour, allowing at times a very feeble current to traverse it. During the first twenty-four hours the limb, especially below the knee, became quite cold, but after that time gradually grew warmer, until finally it was of natural temperature. During the whole time that compression was made, the habitual pain almost entirely left the patient, but again returned, with its former severity, soon after that was discontinued.

On Dec. 6th., at 10½ A. M., I ligated the external iliac artery about a half an inch above the origin of the internal epigastric artery. (I did not tie the latter, for I deemed it most improbable that the circulation in it would force a passage through the tumour after its cavity had become occluded by coagulum.) Less than a half ounce of blood was lost during the operation.

Dec. 7th.—The limb is of natural temperature; very feeble pulsation perceptible behind inner malleolus. In afternoon pulse rose to 90—full and strong. An erythematic blush surrounds wound; slight swelling in anterior and lower part of right lumbar region, which is painful on pressure. There are no other symptoms of peritoneal inflammation. I ordered three pills, containing each

one gr. each calomel, ipecac, and opium, one to be taken every two hours, and applied warm fomentations over swelling.

Dec. 8th.—Pulse reduced to 75, but retaining its strength and fullness. Swelling in lumbar region less painful under pressure. The edges of the wound have united.

Dec. 9th.—Pulse natural. The swelling has become quite hard and is much less painful than it has been. This afternoon, for the first time since operation, slight pulsation appeared in the aneurismal tumour.

Dec. 10th.—The indurated swelling in lumbar region is fast disappearing; edges of wound have separated, and wound is suppurating.

Dec. 12.—The pulsation in tumour has gained in force; there is slight pain in right knee. General condition of patient remains good. It was the opinion of Dr. B. M. Lebby, Surgeon in charge, Dr. J. W. Davis and myself, that it was most probable that hæmorrhage would occur at the seat of ligation from the distal side of the ligature upon its separation, and, that therefore, the femoral artery should be ligated below the aneurism. I made an incision three inches in length extending from a little above the lower border of the tumour downwards; feeble pulsation was perceptible in both superficial and deep femoral arteries; the point of bifurcation of the common femoral artery was involved in the formation of the sac, and I tied both vessels. The pulsation became much lessened in the tumour and hopes were entertained that its cavity would be filled by coagulum and obliterated. Not over a half ounce of blood was lost during the operation. The leg and foot remained cold for several hours, but the circulation was soon restored and the limb became warm.

Dec. 13th.—General condition of the patient continues good.—A suppurating sinus, extending from anterior superior spinous process of ilium, to upper wound, has formed, discharging laudable pus.

Dec. 15.—The upper wound is somewhat sloughy. I ordered brandy in egg-nog twice daily, and good diet.

Dec. 17th.—The slough in upper wound is separating, exposing a healthy granulating surface. I have kept bowels confined since Dec. 5th by administration of opium; to-day ordered a dose of

castor oil, which produced two evacuations. Patient retains his strength remarkably well. The tumour has not ceased pulsating.

Dec. 18-19. Condition of patient remains the same; lower wound suppurating healthily; upper wound beginning to cicatrize. Dec. 20. At 10½ P. M. hæmorrhage from the seat of one of the ligatures below tumour occurred, and before it was discovered the man had lost a large amount (fully two pints) of blood; the bleeding had not ceased when I reached his bed-side, and I at once injected chlor. tincture of iron into tumour through the canula of an ordinary trochar, which caused the cavity to be filled with a firm coagulum and completely arrested all hæmorrhage. The whole limb remained icy cold; in fact the entire surface of the body was cold. I applied warm blankets to limb and a hot brick to foot and administered stimulants. Dec. 21.—The upper part of thigh has become a little warm but below the limb remains quite cold. I continued application of warmth and administration of stimulants; compressed left femoral artery against pelvis during the day, but all effected no good. The general depression of patient, both mental and physical, is extreme. There is complete anæsthesia of greater portion of right lower extremity. Dec. 22.—The limb is turning blue and asthenia increasing. Patient sank rapidly towards night and died Dec. 23, at 5 A. M.

Necroscopy: The tumour was much diminshed in size and its cavity filled by firm coagulum. The hæmorrhage had been from superficial femoral artery at the seat of ligature. The circulation through tumour had been kept up through the internal epigastric artery (which had become much enlarged) and one of the circumflex branches of the femoral which arose directly from the lower and posterior part of the tumour about a half inch above bifurcation of the common femoral, and which was also unusually large. The external iliac artery had become firmly occluded at seat of ligation.

Case by Le Grande Capers, M. D., New Orleans, La.

J. E. N., Sergeant, Cutshaw's Battery, Fry's Company, gun-shot wound of right thigh and buttock; entrance of ball in anterior and

external side middle third of the thigh; wounded Oct. 13th, 1864, operation performed same day; operation, ligation of profunda femoris in upper part of its course.

N. was wounded in action near Cedar Creek, 4 P. M., October 13th, 1864, by a musket ball, presumed to be of the character known as "minnie." The projectile entering the right thigh, about junction of upper and middle third antero external aspect, passed inwards, upwards and backwards, towards deep muscles of buttock, where it defied all efforts at detection. In its course, the ball severed the profunda artery and denuded, for some two inches or more, the femoral sheath. Upon the receipt of the injury, profuse arterial hæmorrhage occurred. A hastily constructed tourniquet, made of a handkerchief, was applied over external wound, and served to arrest further escape of blood; the patient was then forwarded to the field infirmary at Strasburg, two miles in rear, for further attention. Upon examination, a large diffused tumour was discovered over anterior and internal aspect of thigh, principally above the point of application of tourniquet. Upon loosening this tourniquet, arterial blood flowed freely. The patient complained of thirst, chilliness and uneasiness of limb. Pulsation in anterior and posterior tibials free and apparently perfect. No perceptible difference in temperature of limbs. Having no assistance at hand, Chief Surgeon Straith, of the Artillery, was sent for, and, upon consultation, it was decided to ligate the profunda at seat of injury, and as early as practicable. Though an order was at this moment received to remove infirmaries farther to the rear, the case, being deemed urgent, was proceeded with before removal and by candle-light. An incision was made, four inches in length, after the manner of ligating the femoral in the upper part of its course, but three-fourths of an inch nearer the external surface of the limb, laying the tumour completely open, and bisecting the track of the ball at the point desired. Clot and fluid blood was instantly turned out and the wounded "point" sought for. The artery was found of high division, and completely divided about one and three-fourths inches below bifurcation. Ligatures were applied to both proximal and distal ends of artery.—Hæmorrhage and much difficulty attended the operation. We were without the requisite assistance; in a dimly lighted apartment; with

a restless, muscular patient; the parts were distorted almost beyond recognition, from the extensive extravasation and laceration of tissue, incident to the passage of the ball; and an additional impediment existed in the fact, that we were *twice* called upon to desist in our efforts to secure the vessel from cessation of respiration, once accompanied by pulseless condition of the patient. Artificial respiration and stimulation, in each instance, soon reëstablished the natural functions. Chloroform was cautiously administered, but not to the extent of complete anæsthesia. After the operation, the patient was removed four miles; and, under the influence of morphine and stimulants, passed a comparatively comfortable night. He was sent, the following day, to Mt. Jackson Hospital, a distance of twenty miles, and experienced but little inconvenience from the journey. N. has since been transferred to the Receiving Hospital 2d Corps, and from thence to the General Hospital at Staunton, where I believe him to be at present, entirely recovered, so far as the ligation is concerned. The wound closed by granulation, with a healthy cicatrix; subsequently this sloughed, from what cause I am not informed. N. states that the proximal ligature came away Nov. 4th, (22d day) and the distal ligature December 24th (72d day.) I can scarcely believe the accuracy of this latter statement, but have no means of informing myself more reliably on the subject. When last heard from the parts were nearly closed, and the patient's general health almost completely restored. It may be worthy of note, that the ball has caused neither pain nor other inconvenience, and its position is still undetermined.—*Surgical Register.*

ORIGINAL CORRESPONDENCE.

"Sit mihi Fas-scribere audita."

Venereal Diseases and Prostitution Under the License System of Europe.—The Laws, Statistics, and Results of the System.

Paris, 1867.

As American Cities increase in population, the evil of prostitution becomes more and more manifest. The question whether

it shall continue to be prohibited by law and contended against by the police, or be tolerated as unavoidable and placed under licenses and regulations, is exciting thought and perplexity in the minds of many of our wisest men.

With the view of throwing light on this difficult question, I have expended much labour in obtaining the facts and statistics of the principal Cities, both of Europe and America, a Work by no means easy of accomplishment, but I have succeeded so far that I think the question may be decided in the light of the facts which I have accumulated.

I am indebted to the following sources for my information, *viz.*:—The Chief of Police in Chicago, the Chief of Police in Philadelphia, the Chief of Police in New York, the Chief of Police in Liverpool, the Board of Health, New York; the Director of the Administration of Public Assistance, Paris; the Officers and records of the hospitals of Chicago, Philadelphia, New York, Liverpool, London, and Paris; the Police reports of London; and the writings of Parent-Duchatelet, Trébuchet and Poirat-Duval. I am under especial obligations to Capt. Kennedy, Chief of Police in New York, to the Chief of Police in Liverpool, and to the Administration of Public Assistance in Paris, for their full explanations of their departments, and for the records and statistics of their Offices.

The practical question is this:—Shall we recognize prostitution as an unavoidable evil, and try to regulate and ameliorate it by a system of licenses and regulations; or shall we put it on the same footing as other crimes, and endeavour to confront it with direct opposition?

The usual arguments, on both sides, are these, *viz.*:—

1. Prostitution has always existed. It is practically impossible to extinguish it by police regulations. It is better, therefore, to recognize what is unavoidable, and put it under sanitary control, with the view of limiting the spread of venereal diseases. It is further urged, that the patrons of prostitution are not the only sufferers, but that they marry innocent parties and transmit to their wives and children the diseases which they obtained in the houses of infamy. Now, a weekly inspection of the prostitutes, and put-

ting the diseased under treatment, may be expected to greatly diminish the proportion of such cases among them, and, consequently, to diminish the infection carried from them to innocent parties. It is further contended, that by putting these women under such a system of regulation, they can be prevented from exhibiting themselves and soliciting custom on the street; that the houses, being always under surveillance can be rendered more orderly; and, finally, in a system of licensed houses, the police know better where to look for thieves and other malefactors whom justice demands, because they always haunt these dens.

On the other side of the question, it is replied, that the legalizing of a crime is abhorrent to the moral sense of a community. If it is true that it is impossible wholly to extinguish prostitution by legal means, the same may be said of theft and murder, and all other crimes. No doubt, the thieves could be made more orderly if they were registered and licensed. It is feared also that the effect of giving prostitution a regular license and the sanction of law, would be to throw around it a sort of respectability which would increase its evil influence. It is also feared that the effect of undertaking to keep these women free from disease for the benefit of their patrons, would not be an unmixed good. The question arises, whether the fact that government, with a corps of surgeons, is steadily at work examining and removing diseased women from the houses, will not have the effect to cause the unwary to suppose these places to be safe resorts, and thus to greatly increase their patronage, so that the increased prostitution would bring up the sum total of disease in the community to as great a figure as before? If the disease is to be nearly the same and the prostitution to be increased by the system, then the result would be an injury, beyond question.

It will be noticed that all these arguments, *pro* and *con*, are theoretical. What we want is the facts. What is the toleration system? What are its results? Are the Cities where it exists more moral, or more free from venereal disease, than where it does not? The facts below are the answer.

The outlines of the system are these:—The laws announce to the prostitutes that, although their crimes are worthy of punish-

ment, the practical difficulties of the subject have determined the authorities to tolerate prostitution under certain conditions and regulations. These conditions are usually as follows:—

1st. Every woman proposing to act as a prostitute shall, under penalty of imprisonment for refusal, register her name at the police head-quarters, in the book provided for the purpose, and shall only exercise her vocation in the apartment or house permitted by her license.

2d. She shall never walk the streets in gay dresses, nor in any manner, by look, or word, or gesture, solicit patronage in public places. In some Cities they are prohibited from going to theatres, concerts, balls, or other places of public amusement; but in Paris they have immense dance-houses, where they fully revenge themselves for their restrictions on the street.

3d. She shall, at all times, keep a proper array of syringes and sponges, and, after each act of coition, shall thoroughly wash out her vagina without delay.

4th. The houses and apartments shall be subject to police inspection at all hours.

5th. The public women are divided into two classes, the *filles de chambre* and *filles de maison*. The former take a licence to live by themselves in private apartments; the latter go into houses of prostitution, kept by women who have absolute authority over them, and frequently treat them with great cruelty.

6th. The *filles de chambre* shall appear at the appointed place once in two weeks, and the *filles de maison* every week for surgical examination. Here, a staff of surgeons takes them in hand, and examines the vagina, the rectum, and the mouth. Those found diseased are sent to a prison-hospital, where they are strictly confined until they are cured. Those not diseased, are furnished with a certificate of health, with the date of the examination. Those that fail to present themselves for examination are sought out and punished.

There are numerous other regulations for their government, but the above are the main points in most of the Cities where the system exists. The next question is, what are the resuls? Have the Cities

thus regulated fewer prostitutes than others? Have they less venereal disease than others?

To answer these questions, I have, with much labour, gathered the material for the following tabular statements. I place in the first table the Cities which have in operation the toleration system, with the number of registered prostitutes in each. The second table contains those which have not this system. The third shows the proportion of venereal disease in the hospitals of the non-licensing Cities, which is compared with that of Paris.

Table showing the proportion of Registered Prostitutes to the whole population, in Cities which adopt the License System.

Paris	1 Prostitute to	281	inhabitants.
Brussels	1 "	435	"
Berlin	1 "	754	"
Copenhagen	1 "	564	"
Hamburg	1 "	359	"
La Haye	1 "	750	"
Rotterdam	1 "	267	"
Amsterdam	1 "	286	"
Turin	1 "	193	"
Bordeaux	1 "	270	"
Brest	1 "	159	"
Lyons	1 "	424	"
Marseilles	1 "	286	"
Nantz	1 "	378	"
Strasbourg	1 "	281	"
Algiers	1 "	102	"
Average	1 Prostitute to	362	Inhabitants.

This table, I have formed by combining the statistics found in the supplement to Parent-Duchatelet's great work, third edition, issued in 1857. The figures are given on the authority of the Chief of the Sanitary Bureau and of the Chief of the Bureau of Police, of Paris.

Table showing the proportions of Prostitutes to the whole population in Cities which do not adopt the License System.

Chicago	1	Prostitute to	239	inhabitants.
New York and Suburbs.	1	"	518	"
London and Suburbs.	1	"	544	"
English great seaports, Liverpool, Bristol & Plymouth	1	"	193	"
English pleasure towns as Brighton, Bath, etc.	1	"	244	"
English towns depending on agricultural districts, as Ipswitch,	1	"	309	"
Seats of English cotton & linen manufactures as Manchester, etc.,	1	"	557	"
Seats of English woolen manufactures, as Leeds, etc	1	"	654	"
Seats of English mixed manufactures, as Norwich	1	"	478	"
Seats of English iron m'f es, as Birmingham, Sheffield, etc.,	1	"	709	"
Glasgow	1	"	394	"
Madrid	1	"	270	"

Average, 1 prostitute to 425 inhabitants.

From which it appears that the proportion of prostitutes to the population is about 17 per cent. greater in Cities which adopt the license system, than in those which do not.

The great aim of the license system, however, is to diminish the great scourge of venereal disease in the community at large. It is important, therefore, to enquire what the per cent. of venereal cases is in the two classes of Cities. The difficulties of this investigation are very great, but I have adopted for a standard of comparison the proportion found in the civil hospitals of the various

Cities, excluding from the comparison the military hospitals and the prisons. This method will be as fair for one class as for the other. I have succeeded in obtaining the results in six non-licensing Cities, and in one licensing City, *viz.*, Paris. In the other European Cities, I have been unable to get the statistics with sufficient accuracy to entitle them to places in the tables.

Table showing the proportion of Venereal Patients to all kinds treated in civil hospitals.

Cities.	Venereal Cases.	Total Cases of all Kinds.
Chicago	580	4,147
Philadelphia	1,127	12,292
New York	1,833	23,314
Liverpool	2,073	63,074*
Manchester	3,500	75,000*
London	3,357	31,264
Totals	12,470	209,091

Or one venereal case to about 16¾ of all kinds.

In Paris, which has the license system, I find in the same class of hospitals, as follows :—Venereal cases, 5276 ; cases of all kinds, 84,267, or 1 venereal case to about 16 of all kinds. It appears, therefore, that there is a trifle more venereal disease in Paris than in the average of Cities which have no license system, in spite of the weekly examination of the strumpets.

This result, which at first glance seems so suprising, is readily accounted for, if we look a little further into the practical working of the system. The weekly inspection of the strumpets, under the license system, greatly diminishes the *proportion* of disease among the strumpets themselves, but this very fact acts as a first-class advertisement of the safety of their charms. Hence, their patronage is increased, as is shown by the increased numbers, and this augmented number of risks goes far to balance the diminished danger of each single copulation. In non-licensing Cities, the

* The figures of Manchester and Liverpool, both of venereal and of other diseases, appear very large, because they include the out-patients, as well as the in-patients. In the other Cities, there are no statistics of the out-patients.

fear and disgust of diseased strumpets acts on many minds as a strong deterring influence.

Again, it is a great mistake to suppose that the license system ever effects a complete regulation of this evil. The Chief of Police in Paris shows that in every City where the plan is atttempted, there is a large class of prostitutes, called *insoumis*, or *femmes libres*, who prefer their liberty to police restrictions, and in spite of law carry on their trade clandestinely. Having no medical inspection, they are as much diseased as the prostitutes of any other country. There are no more thorough police corps in the world than those of Paris and Berlin, yet in these Cities a large portion of the habitual prostitutes are neither registered nor regulated.—At the prison hospital of St. Lazare, where all diseased prostitutes are sent for cure, the surgeon informed me that more than half the patients are *femmes libres*—unregistered, illegal prostitutes—captured by the police in the exercise of their profession. In Berlin, in 1857, the number of these clandestine prostitutes was reckoned as far exceeding that of the registered ones. (Parent-Duchatelet's work, vol. ii., p. 675.) If, therefore, it is true that no police has ever been able to suppress prostitution, it is equally true that the best police in the world can neither regulate it nor even register it with anything like completeness. The reasons of this failure are as follows:—

1st. The invincible determination of many of these women to preserve their liberty, and to avoid the restrictions of police regulations. This is human nature the world over, and there is no police which can compress it out of existence.

2d. The police often know to a moral certainty that a woman is living by prostitution, but if she is quiet and orderly, and if there is not clear legal proof of her actions, a seizure of her person, and a consigning of her by force to the infamy of a house of prostitution, excites a degree of popular resentment which neither the police of Paris or any other City are willing to brave.

3d. The same remarks are applicable to clandestine prostitutes of orderly behavior, who make a fair pretence of living by some legitimate business.

4th. There is a class of prostitutes, who are pursuing their trade

under the roofs of their parents, often with their approval. If they are not disorderly, they have a sort of quasi respectability, and have still a chance to marry and reform, which they occasionally do.— Practically, the magistrates, though knowing their character and probable ultimate destiny, shrink from tearing them from the parental protection, and from sundering the last tie which connects them to the possibility of a virtuous life.

5th. So far as I can ascertain, no effort is made to register the mistresses of men who keep lose women for their own exclusive use.

6th. No police pretends to supervise that indefinite mass of licentiousness which prevails *con amore* among the people, and is a matter of passion and not of pecuniary consideration.

From these various facts, it results that the European officers of justice are unable to reach more than a small portion of the sources of venereal contagion. They prevent a part of the disease of the registered prostitutes, but the great tide of clandestine licentiousness flows past them unchecked and saturated with syphilitic infection. I think that the statistics plainly show three things:—

1. The license system never succeeds in putting anything like the whole number even of professional prostitutes under regulation, much less the semi-professional ones.

2. It does not diminish the sum total of venereal disease in community, but only the relative risk per copulation.

3. It increases the amount of public prostitution, by giving an impression of the safety of the inspected brothels, and thus affording them the very best possible advertisement. Meanwhile, it never fully frees them from infection, and the increased number keeps up the sum total of disease.

There are, however, some minor advantages gained. Thus the prostitutes are kept, in a great measure, from open solicitations on the streets, so that Cities under this plan present a greater external appearance of decency than others, even though they may be more corrupt in fact. Also, by having the brothels under constant observation, the police prevent many disorders, and when thieves or other malefactors are to be sought for, these houses are excellent man-traps, in which to catch them. This consideration, I find, al-

ways weighs strongly among police officers, in favour of the system, as might be expected from the nature of their duties.

On the whole, it does not appear that the license system is worth transporting to America in its present form. It increases the licentiousness without diminishing the sum total of venereal disease, and this fact is enough to condemn it. I think, however, that some improvement must be made in our present American plan, or rather our *no plan at all*, of managing this evil, but I think we shall be obliged to devise it ourselves, for there is no system in Europe worth copying.

There are some curious developments of human nature in Parisian licentiousness. The strumpets often have a high opinion of themselves, and are even very pious. Here are specimens of their petitions to the Prefect of Police. One commences thus :—

" *Monsieur le Prefet :—*

" Being incapable of labour, in consequence of a double hernia and other grave maladies, it is not for the gratification of my passions, nor for bad habits, that I have for ten years been enrolled in your office (as a prostitute.) The testimony from all my neighbourhood, Monsieur le Prefet, will prove to you that I have, to some extent, effaced by my *morality*, *my decency*, and the *regularity of my conduct*, the degradation of my condition."

An old woman, aged 82, applies in the following terms, for permission for her daughter and granddaughter to open a new house of prostitution :—

" *Monsieur le Prefet :—*

" At the age of 82 years, and the mother of a numerous family, I implore, Monsieur le Prefet, your aid and protection. You who are the father of the poor, the support of the widow and of the orphan, the stay of the afflicted, and the refuge of the unfortunate, will certainly not refuse my request. At an age so advanced, feeling myself near the time when I must render up my soul to God, and appear before my Creator, it is my duty to provide for the wants of my children, and to transmit to them my means of subsistence." Then follows her request for permission to establish a brothel, under the charge of her daughter.

Another woman petitions for leave to open a new house, promis-

ing the Prefect that she will keep in it only "the most distinguished women," who will attract men of such irreproachable character, that "tranquillity, order, faithfulness, and healthfulness will be the inevitable result." Moreover, she declares that the splendour of the house and its furniture will be such, that Paris will glory in it.

Another commences her petition as follows:—

"*Monsieur le Prefet:*—

"I have been a registered woman for ten years, and have lived in my own apartments (*fille de chambre.*) Feeling bound in honour to preserve intact the reputation of *honesty and delicacy* which I have acquired in my neighbourhood, I am forced, in order to fulfil *sacred engagements and to pay some debts of honour*," etc., etc.

It is evident that the Parisian prostitutes preserve their full share of the power of gasconade. The depth of degradation to which these poor women are driven by their paramours is almost inconceivable. The chief-surgeon of the prison hospital of St. Lazare informed me that one woman sometimes sustains forty connections in twenty-four hours, working day and night, to use his own comparison, *comme une machine a coudre a vapeur* (like a steam sewing machine). He states, also, that the men of the Parisian hells have introduced and brought into full vogue, the Oriental practice of copulating with these women *per anum*, instead of *per vaginam*. As an illustration, he showed me a considerable number of women with a peculiar hypertrophy of the anterior border of the anus, produced by this practice. Several of them had the circumference of the rectum studded with chancroidal ulcers, as the result. What is still more incredible, is that these depraved beasts, driven to their wit's end for new measures, to excite their jaded passions, frequently copulate *per os faciis*, so that primary sores are now frequent on the lips and in the interior of the mouth. He showed several patients thus affected, remarking with French vivacity, respecting one of them who had a large chancre on her lip, "elle a joué la clarinette avec un penis d'un homme pour instrument" (she has been playing the clarionet with a man's penis for an instrument.) As a consequence, the examining surgeons are obliged to inspect the mouth,

the vagina, and the anus, before they can give a certificate of soundness.

If, in relating the above facts, I have offended any one's delicacy, I am sorry for it. I deem it important at the present time, when many are proposing to adopt in America the French system, to state the whole truth, that we may know what style of vice flourishes under that system, and judge for ourselves whether it is smaller in its magnitude, or any less revolting in form than that which we already have in our Cities.

As the present continental system is a failure, it brings back the question with perplexing emphasis. What is to be done? The method now in use with us, is to make no effort to break up the brothels, but simply to tolerate them and use them as a means of raising money for the City treasury. For this purpose, the police are sent at irregular intervals to make a "descent" on the houses, when they bring up the inmates to pay a fine. They pay it, of course, as if it were a regular tax, and return at once to their business. It is not expected to break them up by this method. The plan amounts to a kind of license for fees, but the money is collected in a vexatious and irregular manner that is not creditable to a good government. It seems to me that we should not proceed suddenly to a new and complex system of management, but advance step by step, as experience shows us the road. Probably it would be best in the first place to abandon this system of irregular fines, and allow the brothels a tacit toleration, not in return for fines, but in consideration of strict quietness and good order.

Another step that should be taken is, to make as complete a registry as possible both of houses and inmates. Possibly some new legislation may be required to give the police department additional powers for this purpose. Capt. Kennedy, of New York, takes an accurate census of the prostitutes once a year. The Chicago police keep a careful register of the houses, but not of the persons. It seems necessary to empower the police to make a register of the *persons*. The persons thus registered should not be molested so long as they observe good order, and do not parade themselves in public places; and the fines and imprisonments should be reserved for those who evade the registry or are guilty of violating the rules

laid down for their regulation. Of course, the police should have access to the houses at all hours.

As to the disease, it appears not worth while to tax the whole community for a costly array of hospitals and surgeons for the benefit of the patrons of the brothels. The system in Paris shows no success in extirpating syphilis from the community. For the present, at least, it would seem best to leave the disease as one of the punishments of licentiousness, and let those who have it pay their own doctors to be cured. After having advanced thus far, experience would readily show what other steps should be taken. To sum up, therefore, my proposition is this:—

1. Abandon the infliction of irregular fines.
2. Have a careful registry of brothels and prostitutes.
3. Those women who register themselves should have a tacit toleration, so long as they observe good order and keep the rules laid down to them.
4. Those who do not register, and those who violate the rules, should be visited sharply with fines and imprisonments.
5. Have the houses under close observation by the police.

EDMOND ANDREWS, M. D.

[*Chicago Medical Examiner.*

BUCKINGHAM, VA., 1867.

Mrs. B., a primipara, was delivered of a healthy looking child, after a somewhat tedious labor, on the 16th of September, 1866, weighing, I suppose, six pounds. My attention was called by the nurse to something *odd* in the region of the genitalia; on examination I found a rudimentary penis, occupying the usual position of this organ in the male infant, about an inch and a quarter in length, of the ordinary dimensions, in other respects, with the glans pretty well developed, having a vertical fissure, but entirely *imperforate.* It was unprotected by any preputial covering, the external integument reaching only as high as the cervix, assuming the form on either side of the labia minora.

The scrotum was found rather poorly developed and completely

bifurcated, simulating the vulva, the testes appearing prominently on either side of the cleft. Just at the lower third of this cleft, appeared a connecting tissue, similar to the frœnum labiorum of the female, and from beneath this *emerged* the urethra. No vaginal structure could be detected.

All other parts of the infant, as far as could be observed, were normal and properly developed. At last accounts, it was in the enjoyment of health and growing rapidly.

The male attributes certainly predominate in this case, let the verdict of the anthropotamist be what it may.

This is the first case of hermaphroditism, so called, I have ever seen. Ramsbotham, Velpeau and some other modern authors, give this subject a passing notice, without, however, adducing any plausible reason of a psycho-physiological nature, productive of such an abnormal state of the genitalia.

What could have been the true cause of such an anomalous freak of nature in the case herein reported, it is somewhat difficult to state, but the one assigned for this unfortunate mal-formation, by the mother, is worthy of serious attention and consideration of the Profession generally.

When pregnant about three or four months, she heard of an analogous case in her neighborhood, the impression being so strong on her mind, she could never afterwards succeed in driving it therefrom. Here is a hard nut for physiology to crack, and when the cause, perhaps, of a large portion of these mal-formations is discovered, the mind of the pregnant woman will be found to exercise a potential influence upon the histological developments of the fœtus in utero.

Nœvi-maternal marks are the results of psycho-physiological laws, operating on the peculiarly susceptible system of the pregnant woman. That impressions of a strong character existing in the mind of the mother, can be conducted to the delicately evolving fœtus in utero, by the pervasive agency of neuro-electricity, producing abnormal anatomical changes, together with those of a mental character, peculiar to the mother, is not only a logical deduction

from the laws governing the human economy, but stubborn facts, as well as tradition, corroborate the position herein asssumed.

Wm. R. Putney, M. D.

Hernando, Miss., Nov., 1867.

To add something to the evidence in favour of the value of faradization in certain conditions of the parturient state, I will give you briefly and from memory a case that recently occurred in my practice. I was called to see Mrs. L., in her tenth confinement; found the os uteri dilatable; vertex presenting, and slight, irregular pains. The lady informed me that her labours were always very rapid and that she invaribly runs in danger from flooding. I remained with her several hours, giving occasional doses of ergot, after the os was sufficiently dilated to admit of its use. The ergot not having the desired effect, the pains being weak and inefficient after giving about fʒss of the fluid ext., I determined to use my electro-magnetic machine. When I returned, I found her condition much the same as when I left; the head being a little lower perhaps, but the pain still inefficient. I now applied one pole of the battery to the dorsal region, and taking the other pole in one of my hands, manipulated the surface of the abdomen with the other. In some fifteen or twenty minutes the uterus began acting more vigorously. On making an examination, I now found the membranes very tense, and on rupturing them and at the same time resuming the application of the battery, the pains became very powerful and the child was soon born. As soon as the child was disposed of, I discovered that my patient was flooding considerably and that the placenta was still in utero. Considering it necessary to remove it at once I introluced my hand fully into the womb, and after some effort and delay, removed a firmly adherent placenta. My hand did not cause the organ to contract, but was followed by a terrific gush of blood. I now again applied the battery, and was much relieved to perceive *immediate contraction*. The hæmorrhage was promptly controlled,

and I am satisfied that this is a very important means of relief in such cases.

It has several times occurred to me to find this condition of inertia, in connection with adherent placenta. Is it a mere coincidence?

J. C. Motley.

City Alms House, Richmond, Va., 1867.

Thinking it may be of some interest to you and at the request of Dr. Joynes, I write you in reference to "hypersulphite of soda" as a remedy in "intermittent fever." My attention was called to its use several months since while reading a foreign Journal, and I immediately proceeded to make use of it as an experiment, which met with the most happy and decided results. It is true, my experience in the remedy is but limited, yet I think the nine cases, which received such a speedy cure under its use, will place it *not second* to quinine. The first two cases to whom I admistered it, had experienced several paroxysms before applying for treatment. I ordered ten grains of the hypersulphate to be taken in solution three times a day, and not another paroxysm followed. The three next cases were patients who had been taking quinine from time to time, but there were regular recurrences of the attack. The same amount of soda was given which completely eradicated the disease, without a single recurrence. The four last cases met with similar results, and I have no hesitancy in saying that I believe it to be superior to quinine, which will not prevent a recurrence on the 7th or 14th day, unless the system is kept constantly saturated with it. When opportunity offers, I shall pursue my experiments and inform you of the results. Dr. Cullen, of Hanover, has used it in upwards of 200 cases, and pronounces it to be an infallible cure. These facts may be of interest to the readers of the Journal, and may cause a more thorough investigation of its medicinal virtues to be instituted.

I beg leave also to report to you two cases of epilepsy, which were treated with bromide of potash.

Case 1st.—J. D., æt. 19, had been suffering with epilepsy since childhood, with an average of three convulsions a day. On the 28th of August, he was ordered ten grains of the bromide three times a day, and on the 17th of September had had but a single convulsion, which doubtless was produced by some irritating cause. He then left the hospital, but has lately returned completely cured.

Case 2nd.—G. W., æt 22, had been afflicted with convulsions for years, but did not experience as many attacks as case first. On the 2nd of September the treatment with bromide of potash (grs. x. 3 times a day) was commenced. About the 20th inst. he complained of a soreness about the throat, and thinking it might be produced by the remedy, I discontinued its use for several days until he ceased to complain of his throat. It was then recommenced and continued for 15 days. He has not up to the present experienced a single convulsion, not even an "aura."

JOHN J. ROBERTSON, M. D.

VICKSBURG, MISS., 1867.

In the Winter of 1863, I treated S. L. H., æt. 24 years, by occupation a farmer, a soldier belonging to a Missouri regiment, for pneumonia involving both lungs. After a long and protracted illness, he recovered sufficiently to be removed to the home of a friend living in the country. I heard nothing from him for six months, when he presented himself at my office, perfectly restored to health, and more robust than he had been for years. To my surprise, he informed me that he had not "spoken above a whisper," since he left the hospital, and that he had been treated by several physicians and army surgeons, and "blistered and burnt, and nauseated, all to no purpose." Aphonia, so frequently the result of catarrh, is but of little importance, but when despite the usual remedies, and consequent upon some powerful nervous emotion, without any appreciable disease of the vocal cords or appendages, it becomes of serious consideration to the conscientious physician. After careful examinination, I pronounced the case laryngo-paralysis.—There was no need for constitutional treatment. I commenced the

external application of croton oil, over the region of the neck and thorax, and directed him to apply the oil twice daily, until copious pustulation was produced. Ten days afterwards, he called at my office, in a perfect ecstasy of delight, to inform me that his voice was entirely restored, and perfectly natural. Mr. H. is now a citizen of this City, and his vocal powers are perfectly good. Believing it to be the duty of the physician to promulgate whatever may alleviate disease and distress, and not "hide his light under a bushel," has induced me to make this report.

J. R. Hicks, M. D.,

Louisville, Miss., Nov., 1867.

I desire to call the attention of the Profession to the most simple mode of treating the tænia or tapeworm.

I was troubled for some years with tapeworm; I had feelings of depression, irritable temper; I passed from one to ten joints of the worm at almost every action of my bowels for near two years.—Regarding spts. turpentine as the only effectual remedy, and it being a very disagreeable one to me, I neglected any treatment, until my friend, Dr. R. B. Scott, of Warren county, recommended pumpkin seed tea. Prof. Wood in his practice, notices the use of an infusion of pumpkin seed, but the remedy had so short a notice as to leave me to believe it was not worth trying, but being simple and safe, after my friend, Dr. Scott, recommended it, I gave it a trial, with perfect success.

Miss J. L., of this place, applied to me this year for treatment. She was suffering a great deal from tapeworm. I recommended pumpkin seed tea as follows: ℞. iv℥ pumkin seed bruised, 1½ oz. water; boil to one pint. Use the whole pint during the day; next day use another pint of the tea, and on the morning of the third day, an active purgative should be used, castor oil is as good as any. But little diet should be taken while using the tea. My patient used the tea as above directed, with perfect success, except that the worm was passed before any purgative medicine, and she has not been troubled since.

Fresh seed, I think is the best, at least their effects are more pleasant than the old seed. I write the above for the benefit of the Profession, and hope they will give the remedy a fair trial, and report the same.

G. Y. Woodward, M. D.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

"Judex Damnatur cum nocens Absolvitur."

A Practical Treatise on Urinary and Renal Diseases, Including Urinary Deposits. Illustrated with numerous Cases and Engravings. By William Roberts, M. D., Physician to the Manchester Royal Infirmary, etc. Philadelphia. Henry C. Lea. From the Publisher.

The Work is divided as follows: the first, or introductory portion, treats of the physical and chemical properties of urine in health and disease. The author does not give the usual array of tables, in regard to the rates of excretion of all urinary ingredients, etc., which are of little chemical value, but refers his readers, for information on such details, to the volumes of Vogel, Parker, Beale, Thudichum and Hassall. He does, however, give all that is valuable to the busy practitioner.

This part of the book is concise but very complete. The physical properties and mode of examination of the urine are first described: then the chemical constituents and their variations; next Inorganic Deposits; and, lastly, Organic Deposits. The more important deposits are considered under the following heads:—naked-eye characters, micro-chemical characters, production and occurrence, clinical significance, and treatment. We would especially direct attention to the sections on Oxaluria, Hæmaturia, Albumen, and Sugar, as affording admirable summaries of the more recent knowledge of the morbid states of the urine. As regards oxaluria, Dr. Roberts quotes from Dr. Golding Bird, a description of the

symptoms which accompany the disease, but questions whether there is any real *oxalic acid diathesis.* He says:

"The patient often fixes on some derangement of the sexual function, generally, in these times, on spermatorrhœa, under the inspiration of unscrupulous publications too widely circulated among the curious public; or on heart diseases, consumption, or gravel.—The physician is able by means of physical examination to set aside these more open delusions, but falls himself into a trap of his own ingenuity, and is only more elaborately wrong than his patient. He finds crystals of oxalate of lime in the urine, and persuades himself that he has discovered the first link in the chain of consequences. It may be much questioned (and I certainly see no necessity for such a supposition) whether there be any morbid condition antecedent to the plain symptoms of the case, namely, a nervous system upset, because overtasked, and a digestion deranged because mismanaged."

He gives his reasons for these remarks, viz:—

1. Intense oxaluria may exist persistently without evoking the group of symptoms attributed to the oxalic diathesis.

2. This group of symptoms may exist in typical developments without the occurrence of oxaluria.

3. The most varied morbid states coëxist with oxaluria.

The second part of the Work, occupying 128 pages, is devoted to diseases of which the chief characteristic is an alteration of the urine. The diseases treated of are Diabetes insipidus, D. mellitus, Gravel and Calculus, and Chylous urine.

The third part is devoted to organic diseases of the kidneys; viz., congestion, or renal derangements which are occasioned rather by an undue determination of blood to, or some mechanical obstruction to the return of blood from, the organs; Bright's disease, acute and chronic; suppuration in the kidneys; renal embolism; pyelitis and pyonephrosis; concretions of the kidney; hydronephrosis; cysts and cystic degeneration of the kidneys; cancer, benign growths, tubercle of the kidneys; Entozoa, and anomalies of position, form, and number of the kidneys, etc.

This Work is confidently recommended to the Profession as embodying all relative information, upon which actual reliance can be

placed. The Publishers have issued it with great liberality and the illustrations are numerous and admirable.

CIRCULAR No. 7, WAR DEPARTMENT, SURGEON GENERAL'S OFFICE. Washington, July 1st, 1868. A Report on Amputations at the Hip-Joint in Military Surgery.

This Report was prepared by George A. Otis, M. D., Assistant Surgeon and Brevet Lt. Col. U. S. Army, Curator of the Army Medical Museum, in observance of instructions, received from Maj. Gen. J. K. Barnes, Surgeon General U. S. Army.

There is first given an Historical Summary, of the subject, that is so valuable and important, as to make every Surgical library incomplete without it. This Summary was published, for the benefit of the readers of this Journal, in the November issue. It reflects great credit upon the writer, and exhibits rare judgment, combined with admirable perseverance and most efficient industry.

Next in order is a list of all the hip-joint amputations, performed in both armies, with brief histories relative to each amputation—the names of the operators and all details necessary to authenticate the amputations being carefully stated.

In many instances, engravings of the mutilated bones are incorporated in the text.

The amputations given include primary, intermediate and secondary operations, with all the reamputations reported.

There is a tabulated arrangement of all important facts, in which these are concisely and satisfactorily given, viz., the number of the operation; the name of the operator; the name of the patient; the character of the injury; the character of the operation; the result with "remarks."

A valuable portion of this volume is that in which are detailed the opinions of Surgeons on amputations at the hip-joint.

In the "Concluding Observations" are practical remarks, by the author, in regard to the different methods of operating, with illustrations and descriptions of the most improved tourniquets and compressors.

Appended to the Work are lithographs and chromo-lithographs of

those upon whom the hip-joint operation has been performed, with excellent engravings of injured and diseased bones. These drawings are admirably made and coloured, adding much to the interest and value of the volume. It is hoped that this Work will be generally and generously distributed among the prominent Practitioners of this country.

MISCELLANEOUS.

"Non Omnes Eadem mirantur Ament que."—Hor.

The Inoculability of Tubercle.—A very interesting communication was made to the Pathological Society on Tuesday night by the President (Mr. Simon, F. R. S.) in reference to the production of tuberculosis by inoculation. Mr. Simon said he had followed up the novel experiments of continental observers, and had succeeded, by the introduction of the tuberculous matter, in producing tuberculous deposits in several rabbits, some of whom belonging to the same litter on whom this experiment had not been performed, being entirely free from any disease of the kind. In the case of rabbits inoculated with matter obtained from other rabbits in whom tuberculosis had been produced, the development of tubercle was much more general through the lungs and the body (and also in greater amount), as though the tubercle had become acclimatised, so to speak, to the system of the rabbits. In one case, that of a doe, the only apparent effect was to cause every fresh litter to be still-born. Mr. Simon observed that his experiments seemed to show that the disease was produced as well when the yellow tubercular deposit was used as when the grey granulation material was employed. Dr. Andrew Clark recounted his own researches on the subject, and suggested that it would be desirable to suspend judgment upon the question in consequence of the startling inferences that would necessarily be drawn if such experiments were accepted as true. He thought that sufficient arguments were at hand to call in question the results of the experiments of continental observers. In the first place, the deposit in the rabbit was essentially cellular, whereas the gray granulation of tubercle was corpuscular. He had never seen the secondary concomitants in the monia and the like. The condition described as tuberculisation might be produced by introducing any aplastic fluid into the system; and the experiments already recorded by different observers seemed in some measure

contradictory: some of them producing the artificial tuberculisation with yellow, others with grey, tuberculous matter.

The specimens of Mr. Simon, handed round, showed to all appearances tubercular matter; and they were referred to a committee for a report. The facts relative to these pathological specimens are of great interest, as the reception given to Mr. Simon's remarks clearly indicated.—*Lancet.*

Treatment of Inebriates.—Dr. Day, the Superintendent of the Binghamton (New York,) Inebriate Asylum, publishes a letter, in which he advocates the practice of totally withdrawing from the habitual drinker all liquor, in opposition to the prevalent idea that the patient must be gradually weaned from the use of alcoholic substances, and founds his assertion on the fact that he has treated 2,500 cases of inebriety during the past ten years. He believes that the man who has been in the habit of drinking a quart of liquor per day will suffer more by being allowed only a pint and gradually less within the same lapse of time, then he will if he is kept altogether from the use of it. The blood of such patients is, in his opinion, poisoned by the substances which alcoholic liquors contain, and he does not, therefore, see the necessity of administering any more of such poisons, even in the infinitesimal doses. He believes that nothing short of absolute abstinence will keep the inebriate cured, after he is raised up from his former life of degradation.

Sulphate of Soda as a Remedy for Maculæ of the Cornea.—Dr. De Luca reports to the French Academy of Sciences that sulphate of soda, which has the property of maintaining the fibrin of the blood in a fluid state, may be used with success in removing these spots. The best method of using it is to reduce the salt to a fine powder, and drop a pinch of it into the eye of the patient while in a horizontal posture—the salt is soon dissolved in the liquids of the eye.—*Medical Record.*

Beer Versus Bread.—The amount of nutriment contained in beer is generally greatly over-estimated. Leibig asserts that in 1,460 quarts of the best Bavarian beer there is exactly the nourishment of an ordinary two and a half pound loaf of bread. This beer is about on a par with our best American beer. Instead of being a condensation of the nutriment contained in the grain, in just so far as the liquid has undergone fermentation, the nourishment has disappeared.—*Ib.*

Support Medical Journals.—No man can fulfil the mission of a doctor unless he takes a good Medical Journal, and it is useless to cry poverty. The best investment a practitioner can make—one that insures him bread, meat and clothes—is not six, but fifty dollars' worth of good Medical Journals. If a man practises without this sort of communion with his brethren throughout the world, he deserves to be poor. Surely the community in which he lives has a right to keep him so.—*Southern Journal Medical Science.*

Sugar in Muscle.—It is difficult to say whether the question of the formation of sugar in the animal body is more interesting to the physiologist or to the physician. It is noticeable that the first gleams of knowledge of this subject came to us through clinical channels, the later ones through physiological. No subject more clearly illustrates the fact that pathology and physiology are only parts of the same great study, and that the greatest results in practical medicine are likely to accrue from the progress of an ever-advancing physiology. One of the great recent achievements of physiology is to make us familiar with the idea of the normal presence of sugar in the animal body. There would seem to be little doubt that it exists in a very small quantity in arterial blood, and even in healthy urine. It is still an undetermined question whether sugar is formed by the liver during life, and in perfectly healthy conditions. It is still generally believed that Bernard is right in thinking that it is. But it must be admitted that there are some very weighty dissenters from this doctrine. Be this as it may, all are agreed as to the existence in the liver of all healthy animals of a substance resembling starch (hepatine), discovered by Bernard, and which, under the influence of a ferment in the blood, is easily convertible into sugar—a conversion which happens certainly after death, and in various diseased conditions, such as those interfering with respiration, tetanus, chloroform inhalation, injuries of certain parts of the nervous centres, of the liver, &c.

Our immediate object at present is to direct the attention of our readers to another gleam of light as to the genesis of sugar in animals. We are indebted for this to the discovery by G. Meissner in 1861 of the existence of a true sugar in muscle. He went so far in 1862 as to exhibit sugar obtained from muscle. A very interesting outline of this discovery, and of a late confirmation of it by Dr. Johannes Ranke, of Munich, will be found in the *Journal of Anatomy and Physiology*, No. II. (Macmillan), for May. This outline is by Dr. M'Donnell, whose kindred researches make him an authority. We have not space enough to give the full particulars of Ranke's experiments, for which we refer our readers to the

Journal, in which they will find much other original and very valuable matter. The principal conclusion to which Ranke came was "*that sugar is developed in muscle as the result of muscular action.*" In order to show that the sugar was not produced by the liver, this organ was extirpated. The only other source of deception was the presence of blood in the muscle, which might be supposed to contain sugar. This was guarded against, and muscle cut out and freed from blood was found to contain sugar, and to have the quantity increased after tetanisation. Dr. M'Donnell thus concludes his paper:—"Meissner's supposition is therefore fully confirmed, and Ranke has the merit of having established on a secure basis the following propositions: 1. That there exists a true fermentable sugar in muscle. 2. That the amount of this sugar is increased by muscular action (tetanisation caused by strychnine or electricity). 3. That the liver has no effect in causing this increase; for the sugar is proved to arise in the muscle itself, and from the muscular substance."—*Lancet.*

In the German War last year, 105 officers and 2,573 soldiers of the Prussian army fell on the field of battle; 120 officers and 2,800 soldiers died subsequently of their wounds, making 5,738 in all; and 562 officers and 14,730 soldiers were wounded, but recovered. A French Medical Journal attributes this mortality chiefly to the want of care on the part of the government for the lives of its soldiers, in engaging in war without any adequate sanitary organization for their relief.

Miraculous Cures.—We give the following newspaper story of the Zouave Jacob for what it is worth:

"Paris has a new sensation of a most extraordinary character. One Jacob, a soldier in a Zouave regiment, is working miracles of healing, merely by the power of his eye. Numerous witnesses testify to the efficacy of this marvelous ocular influence, among whom the Count de Chateau-Veillard, who is quite enthusiastic in his testimony about it. The Count, who was paralyzed, narrates in a published letter, how he was conveyed from his carriage up a long, dark, dirty court, by his valet and an artisan, into the presence of the wonder-working Jacob, whom he found surrounded by lame, blind, halt, and maimed, all waiting to be healed. When taken into the apartment, he lay in a perfectly helpless state, but Jacob, looking at him, told him to rise and walk, and to his astonishment and delight, he found himself able to do so, and returned to his carriage with elastic step. The neighborhood of Jacob's residence presents quite a scene, the street being crowded with people, who from pave-

ment, and windows and house tops, loudly cheer the cured as they leave the Zouave's domicile. It is declared that Jacob has completely cured Marshall Forey of paralysis of the left side. According to the French law, Jacob not having taken his degree as a physician or surgeon is not allowed to receive even the smallest remuneration for whatever cure he may effect.—*Cincinnati Lancet and Observer.*

Fossils Preserved in Ice.—About 40,000 pounds of fossil ivory—that is to say, the tusks of at least 100 mammoths—are bartered for every year in New Siberia. As many as ten tusks have been found lying together in the "Tundra," weighing from 150 to 300 pounds each. Notwithstanding the enormous amount already carried away, the stores of fossil ivory do not appear to diminish. In many places near the mouths of the great rivers flowing into the Arctic Ocean, the bones and tusks of these antediluvian pachyderms lie scattered about like the relics of a ploughed-up battle-field. Entire mommoths have occasionally been discovered, not only with the skin—which was protected by a double covering of hair and wool—entire, but with the fleshy portions of the body in such a state of preservation that they have afforded food to dogs and wild beasts. The mammoths appear to have been suddenly enveloped in ice, or to have sunk into mud which was on the point of congealing, and which, before the process of decay could commence, froze around the bodies and preserved them in the condition in which they perished. It is thus that they are occasionally found when a landslip occurs in the frozen soil of the Siberian coast, which never thaws, even during the greatest heat of Summer, to a depth of more than two feet; and in this way, within a period of a century and a half, five or six of these curious corpses have come to light from their icy graves. A very perfect specimen of the mammoth in this state was discovered in the Autumn of 1865, near the mouth of the Jenissei. An expedition was dispatched to the spot by the Imperial Academy of Science last Summer, and Mr. Lumley, Her Majesty's Secretary of Embassy, states that it is considered the result of the expedition will disclose some interesting facts in the natural history of a former creation.—*Exchange.*

The Therapeutical Advantage of Position in the Treatment of Shock.—The following case is presented in the "Chicago Medical Journal," by Hiram Wanzer, M. D.: March 16th, J. T., æt. 9 years, had fallen through a hatchway, alighting upon his head, and was taken home in a state of profound insensibilty. There was scarcely any pulse when I arrived, and the heart's action was nearly

suspended; there was general pallor of the countenance and coldness of the extremities, every symptom indicating early dissolution. I immediately raised the body and legs to an angle of 45°, and in less than 15 minutes, quite a full pulse returned at the wrist; the action of the heart was stronger, and the glow returned to the cheeks, showing that the capillary circulation was being established. He was now placed in the recumbent posture to remove his clothing and examine his body for injuries, and in a moment the blood forsook the wrist, and the heart's action was again more imperceptible. I thought he was gone. I placed him instantly in the former position, and in less than five minutes the pulse returned, and the heart began to beat with renewed vigour, and the brain responded to its accustomed stimuli. The *rationale* of the treatment—the blood returned to the capillaries, and the machinery of life temporarily suspended, was again set in motion. He remained in this position thirty minutes longer, when he was placed in the recumbent posture. Cold applications were applied to the head, and hot epithems to the feet, and an enema of whiskey, ℥ ss, with gum camphor gr. v. was given. This measure assisted in completing the reäction. His convalescence was exceedingly rapid, but he was speechless 24 hours.

Comfort for Young Anatomists.—"During my attendance at the Windmill Street School, I worked hard in the dissecting room, and learned a good deal of anatomy. If I did so, however, it must be owned that it was rather as a duty, and because it was necessary to my future undertakings, than because I had any particular taste for the details of anatomical study. I remember some years afterwards dining with a friend, who was a craniologist at the Athenæum, when he told me that he saw that I had the organ of constructiveness much developed, and that this explained how it was that I excelled in the use of my hands, and was an excellent dissector. There was never a greater mistake. I was naturally very clumsy in the use of my hands, and it was only by taking great pains with myself that I became at all otherwise."—*Sir Benjamin Brodie's Autobiography.*

Cholera in Italy.—Statistics recently published in Italy show in eight months in United Italy, there were 32,577 cases, 12,901 deaths. Majority attacked were men—15,467 were among the poorer classes. Rates of mortality greater among higher classes, being 60 per cent. of those attacked. Cases few among children. Susceptibility most evident between ages 20 and 25.

Disinfectants.—Mr. Crookes, says the "Medical Times," has shown that the favorite disinfectant, chloride of lime, is about the least efficient of any of those substances reputed to possess disinfectant qualities. Chlorine itself, is very little better, for if used in large enough quantities, it will in time destroy the virus, but as it acts by way of oxydation, and as living virus resists this longer than dead oxydizable matter, before the gas can attack a virus, everything else that it can oxydize will be oxydized first. And if, when pure, chlorine is so slow of acting, when adulterated with eighty per cent. of lime, its value is proportionately less. In sulphurous and carbolic acid, on the other hand, there are substances absolutely destructive of every living thing of low organization, such as cattle-plague virus is supposed to be. These substances, besides destroying the virus, attack it at once, and arrest all putrefying tendency.

Clifton Hall, a Private Hospital for Mental Diseases.—In common with all hospitals for the insane, a few inebriates have, from time to time, placed themselves under the care of this establishment. As separate provision, however, has now been made for the treatment of inebriates, through the philanthropic efforts of Dr. Joseph Parrish, I feel no longer called upon to receive them. Permit me, then, through the agency of the *Reporter*, to respectfully notify the medical Profession that hence forward no inebriate can be admitted at Clifton Hall.

As few efforts have been made to place the claims of Clifton Hall before the public, as a desirable retreat for the care and treatment of those laboring under mental disease, a few words may not be out of place. The grounds, twenty-five acres in extent, are situated at Clifton, Delaware County, Pennsylvania, less than seven miles from the centre of the City of Philadelphia, and are accessible by the Baltimore turnpike, and Media railroad. The site is one of the finest in the country; salubrious and commanding an extensive view. The house, though containing every necessary requisite for the treatment of the mildest or most violent case, in architectural arrangements is totally divested in all its parts of the prison like solidity and gloom unavoidable in large hospitals. My family and patients take their meals at a common table, differing in no respects from the tables of the educated classes elsewhere. A lady, a good musician and well-educated, lives in the same apartments and devotes her time to the lady patients, thus securing them on all occasions, an educated companion and watchful friend. The attendants are experienced, attentive and respectful. The small number of patients the house is designed to accommodate—about twenty of each

sex—admits of the most accurate supervision on the part of the superintendent, and affords the patients direct access to him at all times, thus securing to each case the individual and particular attention requisite, and in a therapeutical point of view, indispensable to the hope of cure.

R. A. Given, M. D.

Medical and Surgical Reporter.]

Animal Grafts.—A French naturalist, M. Vulpian, cut off the tails of tadpoles, and saw them not only live but *grow* for ten days, indifferent to all theories of nervous centres, digestive apparatus, or circulatory systems. But the member that seems to have the strongest dose of the "vital principle," is the tail of a rat. The following experiment was made by Mr. Rert. He dried a rat's tail under the bell of an air pump, and in immediate proximity to concentrated sulphuric acid, so as gradually to deprive it of all moisture. Then he placed it in a hermetically sealed glass tube for five days. At the end of this time he subjected it for a number of hours to a temperature of 98 degrees centigrade in a stove, and subsequently sealed it a second time in his tube. Four days more having elapsed, he united this tail by its cut extremity, to the freshly cut stump of a living healthy rat, and quietly awaited the result. His success was as complete as it was marvellous. It commenced to expand and perform the natural duties of a tail, and three months afterwards, he demonstrated by a second amputation, and a careful injection, that it was furnished with proper vessels and was a living part of the second rat!

What rich lessons practical surgery may learn from such experiments, can be imagined. A careful anatomist has transplanted a fragment of bone from the skull of one rabbit to the skull of another, and found it form adhesions and replace the lost portion perfectly. A piece of periosteum taken from a rabbit twenty-four hours after death, grew and produced bone when grafted neatly on a living animal of the same species Nerves also have been removed from one body to another with success, and some very singular results noticed were a portion of a motor was excised and supplied by a fragment of sensory filament. The disease to which grafted members are subject, after they have been exposed to certain reagents, are also full of hints for the pathologist and physician.—*Med. and Surg. Reporter.*

Testing Glycerine.—The effect of glycerine on tender and broken skin should be mild, but physicians often hear complaints of

its burning and inflammatory action, even when it has been largely diluted with water. The effect of such glycerine is now known to be due to the presence of a certain amount of oxalates and formates, also traces of ammonia. Litmus paper will remain unchanged in such impure glycerine; but when the latter is mixed, in a test-tube, with its equal bulk of sulphuric acid, a strong effervescence will take place. It has also been ascertained, that such glycerine was not obtained by the process of distillation, but was only partially purified by chemical action.

Muriate of Ammonia in Senile Gangrene, and Tetanus.—Senile gangrene has been treated with remarkable success by Dr. Charles Gru. He plunges the limb into a foot-bath containing about a half pound (250 grammes) of muriate of ammonia, and retains it there for several hours. Fomentations of the solution are constantly applied on the exterior. Under this application the normal heat and colour of the limb gradually return.

In tetanus it is recommended in doses of two or three drachms a day in large quantities of water. It brings on an abundant diaphoresis, with which critical evacuation the disease is said to yield.—*Med. and Surg. Reporter.*

Puerperal Convulsions Treated by Bromide of Potassium. Dr. J. B. Wood, of Croton Falls, N. Y., in the *Amer. Jour. of Med. Science*, gives the following case:

Mrs. Q. aged 40, multipara, was taken July 14 with severe cephalagia, which continued unremittingly up to the morning of the 17th, when she was delivered by one pain of a living child. Shortly after, she was taken with convulsions, and Dr. C. Lee being called in, prescribed morphia, and cold to the head. At 8, P. M., when I saw her in consultation, she had had five convulsions; pulse 45. I suggested the use of bromide of potassium in fifteen-grain doses, to be given every two hours. 10, P. M. Had one convulsion about half an hour after the administration of the first dose; slept some afterwards.

July 18. 8, A. M. The attendants had been unable to administer the medicine. Patient had had three convulsions during the night, but since 3, A. M. had slept very quietly. We then aroused her, and succeeded in administering the bromide, to each dose of which one grain of bromide of ammonia was added, and this was given during the day at the same intervals. In the evening she awoke as from a sound sleep, and inquired what had been

the matter with her, not even remembering the birth of her child. Pulse about 65.

The same treatment was kept up during the night and next day, with the exception that the medicine was given at longer intervals. The patient had no more convulsions after 3, A. M. of the 18th, and only a little fever followed, which was controlled by ordinary remedies.

I would not hesitate to give the bromide of potassium in still larger doses, and I believe that as soon as the system can be brought thoroughly under its influence not another convulsion will take place.

Exercise and its Effect.—Mr. Archibald Maelaren, in a volume entitled "Training, in Theory and Practice," speaks of the immediate effects of exercise on the muscles most actively engaged at the time. He found the law of development strongly demonstrated in a long pedestrian tour, extending over nearly four months, in which the average per day on foot exceeded nine hours, and usually with a knapsack weighing twelve pounds. During this time the chest fell from 41 to 39½ inches in circumference; the upper arm from 14½ to 13¾; the lower arm remaining unchanged at 12½ inches. The lower limbs, on the contrary, were greatly increased—the calf of the leg passing from 16 to 17 1-4 inches; and the thigh from 23 1-4 to 25 inches. Often recorded examples to the same purport are seen in the great development of the legs of dancers and the arms of a blacksmith, etc.—*Med. Record.*

Treatment of Gonorrhœa.—Dr. Dyes (*Schmidt's Jahrbucher*, No. 2, 1867) says: "Copaiba, it is known, does harm at the commencement of gonorrhœa; it does but little good after the inflammatory stage has passed off. It is almost incredible how practitioners, who throughout the whole course of gonorrhœa order abstinence from everything likely to cause irritation, can, in direct opposition to this, prescribe a medicine so irritating to the kidneys and urinary passages as balsam of copaiba." His treatment consists in subduing inflammation of the urethral mucous membrane by soothing, mucilaginous, and cooling medicine, combined with a spare diet and rest, and directly after the removal of this inflammatory condition, an injection of zinci sulph. is applied to the urethra.

M. Luc, in the "Brit Med. Journal," March 23, recommends a tolerably thick solution of starch in acute urethritis. "It never produces pain, and avoids strictures."

Period of the Growth of Man.—Prof. B. A. Gould, from statistics derived from the register of two and a half millions of men in the United States Army, has brought out the fact that men attain their maximum stature much later than is generally supposed. This takes place commonly at 29 or 30 years of age; but there are frequent instances of growth until 35, not very noticeable—a yearly gain of a tenth of an inch, perhaps—still a growth. After 35, the stature subsides in similar proportions, partly perhaps from the condensation of the cartilages, partly because of the change occurring in the angle of the hip bone. The age for maximum stature comes earliest to the tallest men, as if it were the necessity of unusual development. Foreigners were shorter than men of native birth. The height of men seemed to depend on the place of enlistment. A Massachusetts man enlisting in Iowa was an inch taller than if he had stayed at home. As we go west, men grow taller. One man measured more than 6 feet 10 inches. Out of 1,000,000, there were 5,000 who measured more than 6 feet 4 inches; but men of such stature do not wear well. In Maine, men reached their greatest height at 27; in New Hampshire, at 35; in Massachusetts, at 29; in New Jersey, at 31. The tallest men, of 67 inches, come from Iowa. Maine, Vermont, Ohio, Indiana, Minnesoto, and Missouri, give us men a little over 68; and the average of all shows the Americans to be "a very tall people.'

Pepsin in the Vomiting of Pregnancy.—A number of French physicians declare the efficacy of pepsin in the vomiting of pregnancy. It should be given in the dose of eight or ten grains, before eating. Hydrochloric acid is also recommended as equally efficient—thirty or sixty drops to be taken daily, properly diluted. Strychnia, we think, is not inferior to either, the twentieth to the twelfth of a grain three times a day.—*Pacific Medical and Surgical Journal.*

The most Frequent Seat of Urethral Stricture.—M. H. Follett (*Archives Généralcs de Médicine*, April, 1868; *Gazette Hebdom.* April 12, 1867) believes that organic strictures of the bulbo-membranous region, though pronounced to be frequent, are rare. He publishes six cases of organic stricture, of which one alone occupied the bulbo-membranous region, while the remainder occupied the spongy part.

A Simple Remedy for Polypi of the Nares.—Dr. T. Bryant ("London Lancet)," treats mucous polypi of the nares with tannin used as a snuff.

Solutions of Morphine and Coffeine in Chloroform. By Prof. W. Bernatzic in Vienna. (*Wienner Med Presse.*)—Prof. Bernatzic communicates the following formula for obtaining a uniform and permanent combination of morphine with chloroform; viz., three grains of pure morphia are dissolved with the aid of three drops of strongest acetic acid and the application of gentle heat, in one drachm of strong alcohol (93-94 p. c.), to which, when cold, is added one-half ounce of chloroform. Three drops of this solution have been found to correspond to one grain, hence thirty drops (ten grains) contain one-tenth of a grain of morphia, which may be considered as an average dose. The efficacy of this solution is undoubtedly due to the morphine mainly, and the dose should be regulated by the amount of the latter. Yet the action of the chloroform should not be undervalued, as it not only directly increases the anæsthetic effect of the morphine, but enhances it also by favouring the absorption of the latter at the seat of application by reason o its own high degree of diffusibility. Locally applied, the influence of the chloroform is first felt with its undesirable irritating action; but gradually an anæsthetic effect becomes manifest, which neither of these remedies alone are capable of producing.

Most frequently the remedy proved useful in tooth-ache, applied to the gums near the affected tooth rather than to the denuded pulp itself. A wad of cotton saturated with the compound and introduced into the ear, though at first causing painful sensations, assists in removing the pain. The latter means is also serviceable in painful affections of the internal ear. Sometimes the author also used it as a mouthwash, diluted with much water.

In using this remedy internally, it was observed that the frequent disagreeable concomitant effects of morphine, especially nausea and vomiting, were prevented by the chloroform. Hence the combination exerts a peculiarly favourable influence upon painful affections of the stomach and bowels, in the dose of twenty or thirty drops taken on sugar or in some tea.

Besides the quieting and anæsthetic effect (which has been found to take place in still other affections besides the above named more rapidly and more completely than by morphine alone), the tendency to sleep which this remedy induces is undeniable, and the latter approaches more nearly to the character of natural sleep than of narcosis.

Although coffeine cannot, strictly speaking, be regarded as an anæsthetic, but judging from its physiological action should rather be considered as a means of giving impulse to the motor apparatus, yet it cannot be denied that it has proven useful in many cases of neuralgic affection. In certain forms of nervous cephalalgia, es-

pecially, it has not alone been palliative, but even effected radical cure. Koschlakoff's investigations (*Virchow's Archiv*, 1864) have shown that coffeine increases the heart's action and the pressure in the arteries, and that its diuretic effect is based upon the increased arterial pressure. The author is disposed to regard hemicrania as a vasometer neurosis, and according to this view does not find it difficult to explain the efficacy of coffeine in this disease in harmony with its known physiological action. Upon the sensory nerves, coffeine seems to exert no direct influence; indirectly, by reflex action, it may indeed cause hyperæsthesia. The combination of chloroform with it in an equivalent dose might therefore aid its effects in the intended direction without interfering with the physiological powers of the coffeine.

The formula for this combination is given as follows: Ten grains of coffeine are dissolved with the aid of a gentle heat in two drachms of strong alcohol previously mixed with one-half drachm of water; when cooled, two drachms (by weight) of chloroform are added.—The preparation is to be protected from the light. Thirty grains of this solution, or seventy-five drops, contain one grain of coffeine. It is used by the author in hemicrania, upon the occurrence of premonitory symptoms, in doses of fifteen or twenty drops at short intervals. An essential adjuvant of the cure or improvement is a strict adherence to a chiefly animal diet for a longer period, especially by such persons as are affected with chronic lesions of digestion, dyspepsia, colic, constipation, etc.

THE EXTIRPATION OF NÆVI BY ENUCLEATION.—An article "on the enucleation of nævus" appears in the "Brit. Med. Journal." This advance in treatment is the result of Mr. Paget's investigations. He demonstrated the existence of a distinct sac in these cases, and upon this fact is based the above-mentioned operative procedure.

APPLICATIONS FOR CARBUNCLES AFTER INCISIONS AND INDOLENT ULCERS.—A solution of permanganate of potash (℥ ss.–℥ j.) is strongly advised as a dressing after the incision of carbuncles, and as applications to ulcers.—Dr. Leavitt, *American Journal Medical Science.*

Another writer (Dr. D. A. Morse, "Med. and Surg. Reporter") prefers the claims of the following application in indolent ulcers, where the tissues are dark and indurated. ℞.—Plumbi subacet., 7 parts; pulv. opii, 1 part; hydrarg. submur., 2 parts. He claims that it relieves pain, induces a healthy appearance, etc.

PRESCRIPTIONS—WHOSE PROPERTY ARE THEY?—Certain abuses connected with the filing of prescriptions by pharmaceutists have induced some practitioners in our Eastern Cities to take action with a view to prevent any use being made of their prescriptions without their consent. In Philadelphia, a number of physicians employ prescription papers on which is printed the stipulation that "this prescription is to be retained by the pharmaceutist, who will neither furnish a copy nor renew it without the written order of the prescriber." The East River Medical Association of New York have passed a resolution requesting that no druggist will renew any prescription of any of its members without due authority for every renewal: also, providing for an answer from every druggist whether or not he will comply with the request. We have no doubt that pharmacists generally would accede to such a request. But as it now stands, physicians are so much in the practice of giving verbal directions for the renewal of their prescriptions as to remove all cause of complaint in regard to the use made of them by druggists. There is one advantage taken of them occasionally, which admits of no defense: namely, when the apothecary uses them as a basis for cough mixtures and other preparations which he issues under his own name. This is done to some extent in San Francisco, though it can be done only by the meanest class of men.—*Pacific Med. and Surg. Journal.*

THE TREPHINE AMONG THE INCAS.—At the last meeting of the Academy of Medicine, M. Broca laid on the table an interesting frontal bone, which had been removed from one of the tombs of the Incas at Cuzco, Peru—tombs which existed prior to the expedition of Cortez. It bore undoubted signs of having been perforated with the trephine; and although the great antiquity of the operation of trepanning has been well established, yet of its performance by the older nations of the New World we had hitherto no indications. The aperture is situated on the left side of the bone, and the condition of the surrounding bone does not admit of a doubt that the operation was performed during life. M. Nélaton is of opinion that the individual must have lived from a week to a fortnight subsequently. A white spot, and the greater porosity of this portion of the bone, would seem to indicate that the process of necrosis was about to be established. There is no trace of fracture, and the probability is that the operation was executed for an internal lesion, which would imply a somewhat advanced stage of surgical diagnosis. The internal table exhibits a porosity and inequality not seen at the outer table, and which give rise to the suspicion that a collection of matter might have existed. The hole is about the same size as in

ordinary operation, but it is quadrilateral in place of being round. A careful examination of the edges of the aperture leads to the conclusion that it was not executed by any special instrument, but by means of a knife, graver, or chisel.—*Med. Times and Gazette.*

The Itch Insect.—Experiments show that the Acarus Scabiei will live 3 hours in water, 2 in olive oil, 1 in solution of acetate of lead, 20 minutes in vinegar and alkaline solutions, 12 minutes in a solution of sulphide of potassa, 9 minutes in oil of turpentine, and from 4 to 8 minutes in solutions of iodide of potassium and iodide of sulphur. A solution of alcoholic extract of staphysagria (Delphinium) kills them in 15 minutes. It follows that the iodides last named, and the staphysagria are the best remedies, as they do no injury to the skin and are easily applied. In the vapor of sulphur the insect lived several hours. Dr. Bennett (*Practice of Medicine*) thinks sulphur has no poisonous effect on them, but that the lard with which it is mixed kills by asphyxiating, and would, therefore, do as well without the sulphur. He could not convert experienced old ladies to that notion. It is certain that sulphur is much more effectual in combination with an alkali than alone. An excellent formula for itch ointment is this · ℞. Sulph. sub., dr. ii : Carb. potassæ, dr i ; Œdipis oz. i ; M. ft. ung. To be used every night for several nights.—*Pacific Med. and Surg. Journal.*

New Publications.—The medical Profession of the United States (many of whom will recollect with pleasure the useful and pleasant hours passed by them during their student life in listening to the clinical instruction imparted by the physicians of that old and venerable institution, the Pennsylvania Hospital, now in the second century of its existence,) will gladly welcome the volume of Reports of Cases and Clinical Lectures, which Messrs. Lindsay & Blakiston, medical publishers of Philadelphia, announce as in preparation to appear early in January. It will contain an introductory article by Prof. Chas. D. Meigs, giving some interesting reminiscences of the early history of the Hospital and the physicians attached to it, and articles by the present medical and surgical staff of the Hospital, as well as by some of the older physician who have served there, with both lithograph and woodcut illustrations, forming a handsome octavo volume, to be continued from years to year.

Messrs. Lindsay & Blakiston will also issue about the same time a translation of Bouchardut's Annuaire de Therapeutique Pharmacologie, &c., &c., now in the 28th year of its existence in France, where it has had a large circulation warranted by its intrinsic value

and the reputation of its distinguished author, who is Professor of Hygiene, &c., to the Faculty of Medicine, Paris. It will be translated and edited by M. J. De Rosset, M. D., Adjunct to the Professor of Chemistry, University of Maryland.

Consolidation of two Medical Journals.—Deeming it conducive to the best interests of all concerned to concentrate their efforts at supplying the Profession with the means of keeping up with the progress of medical knowledge and the collateral sciences, those interested in the conduct of the two Journals hitherto published in Louisiana, have made such arrangements as practically consolidate them into one periodical, combining the resources and the advantages of both. The same talent and energy which have hitherto found expression through the pages of the "New Orleans Medical and Surgical Journal," and in those in the "Southern Journal of the Medical Sciences," are promised to the support of the new publication, which it is proposed to issue as the successor of the two.

We are confident that this friendly coöperation between those whose labours have hitherto been divided must conduce to the benefit of all concerned—to the benefit not only in a mere utilitarian view, but also in fostering that enlarged liberality, and that cordial sympathy, even in a worthy rivalry, which, while they clothe our Profession with the dignity that so well becomes a corps whose pursuits should elevate its members for above the little prejudices of life, at the same time add a charm peculiarly their own to that interchange of observations and that communion of thought which constitute the moving life of medical as of other sciences. "Let us work together in harmony" shall be our greeting to our new associates.

Concentrated Solution of Quinine.—Prof. Wenzel Bernatzik recommends for the purpose of subcutaneous injection, a solution of quinine in sulphuric ether. The alkaloid may be precipitated from a solution of its sulphate by ammonia; after being washed and dried, it is dissolved in ether, which is then evaporated to the requisite degree of concentration. B. recommends a solution containing .05 grm. (7 1-4 gr. of quinia, equivalent to 9.3 of a grain of the sulphate), dissolved in a cubic tentimetre (a little better than 15 min.) of ether. (When Med. Wochensch. XVII. 10, 60.)

We have used a solution of the above strengh at Bellevue Hospital in several instances; it occasioned no pain, beyond the introduction of the syringe, and was followed by no bad effects. In one case, ringing of the ears was caused in two minutes after the injection of 4 gr. of the alkaloid.—*New York Med. Jour.*

Effect of the Absence of Sound upon the Mind and Sense of Hearing.—Dr. H. Ralls Smith, of Louisville, Ky., in the course of certain investigations, has established the truth of the theory that the permanent denizens of the Mammoth Cave are not only without a trace of the optic nerve, but are also destitute of the sense of hearing. Dr. Smith at one time penetrated about four miles into the interior of the cave, and some four hundred feet below the surface of the earth. The effect upon him of the solitude and total absence of sound, he states, was very distressing, and almost insupportable, resulting in a very perceptible, although temporary, defection of hearing and aberration of mind. This explains the fact why persons lost in the cave for one, two or three days, have always been found, when rescued, in a state of temporary insanity. The mind and special senses, deprived of their natural pabulum and stimulus, gradually become weakened, paralyzed, atrophied, and finally, as far as external manifestations are concerned, nearly, if not quite, extinct. These investigations may afford some clue to the cause of cretinism in the deep gorges of the Alps.—*Med. Record.*

Extracts from a Paper on the Treatment of Incised Wounds, &c. By James Syme, F. R. S. E., &c. &c.—In cases of bruise, fracture, dislocation, and even operations of tenotomy, large quantities of blood are frequently effused more or less deeply under the integuments without causing any bad effect, and quickly disappear by means of absorption. How, then, does it happen that blood collected in the cavity of a wound should be productive of so much mischief? It can only do so, as Mr. Lister has shown, through the decomposing influence of atmospheric air, loaded with its myriads of organic atoms, and, therefore, if protected from this agency, would be no more hurtful than in the circumstances just mentioned. He has accordingly found, as stated in the preceding numbers of Journal, that wounds of most formidable character may be divested of all their alarming features by means of carbolic acid, applied so as to prevent the impure air from entering.

This remarkable fact has led me to consider the expediency of resorting more frequently than heretofore to the use of "torsion" for the suppression of hæmorrhage. Ever since this measure was proposed by the late M. Amussat I have employed it in wounds of the cheek and lips, and also occasionally in more serious operations, to let my pupils see that it was quite effectual, but have been prevented from adopting it for general use, by fearing that the absence of ligatures, which serve as conductors of the discharge, would increase the risk of blood or serum being pent up in the cavity.

Feeling now happily relieved from any apprehension of evil being thus produced, I think "torsion" may in many, if not in all cases, be employed with advantage, instead of the ligature. In order to perform the process effectually, it is necessary that the artery should be seized by catch-forceps, and twisted until they become loose. It has been alleged that such a liberty with the vessel must cause it to slough, and thus disturb the adhesive action, But as this objection is altogether theoretical and contradicted by experience, it is unworthy of notice. Dr. Syme concludes:—

1st. That torsion effectually restrains the hæmorrhage of ordinary-sized arteries.

2d. That its action upon them does not prevent union by the first intention.

3d. That protection from the air prevents decomposition of the blood.—*London Lancet.*

Permanganate of Potash in Acute Rheumatism. By C. M. Fenn, M. D., of San Francisco.—An extract from a clinical lecture delivered by Dr. Jas. F. Duncan at the Adelaide Hospital some time since directed my attention to the use, among other remedies, of permanganate of potash in the treatment of rheumatism. I promised myself to make trial of the remedy at the first opportunity. Regarding the so-called chemical theory of the etiology and pathology of rheumatism as, at least, the most plausible. and believing the efficacy of the other salts of potash in that disease to be largely due to the measure of oxygen which they contain, it seemed to me that in this salt we possessed a remedy admirably adapted to meet all the indications; and that from the fact of its containing so large a proportion of oxygen (KO, Mn O), and holding the same in such loose affinity, we should be enabled most speedily to promote the transformation of lactic into carbonic acid. In apparent corroboration of this view, I append the record of three cases.

Case 1. Mr. S., salesman, æt 30, after some unusual exposure, was prostrated by a severe attack of rheumatism. Upon an examination of his case the new remedy recurred to my mind. But the urgency of his symptoms was such, that it seemed preferable to make use of the medicines we had some confidence in, rather than fly to others we know not of. He was, therefore, ordered a preparation of potass, iodid., vin. colch. sem., etc., and submitted to a hypodermic injection of morph. acetas. one-fourth of a grain. To modify the exhausting and troublesome perspiration, he used, on the third day, a vinegar bath, with no appreciable relief. On the fourth day, discovering no change in his condition, other than

might be ascribed to the daily hypodermic injections, I requested him to suspend the mixture and have half a grain of the permanganate, three times a day. At my next visit, on the following evening, I was surprised at the marked abatement of all the symptoms. The tongue was quite clean, the perspiration no longer excessive nor disagreeable, and the pains were so far relieved as almost to preclude the continuance of an anodyne. His convalescence was now constant and rapid, and on the tenth day from the commencement of the attack he was again at his post.

Case 2. Mrs. G., æt. 35, of full habit and previously healthy, was attacked during the passage from New York. There had been a considerable amelioration of the more violent symptoms at the time of her arrival here; but some of the larger joints were still tumid and painful. The permanganate of potash was resorted to, and in a few days she was able to attend to her household duties.

The third case I regarded as, in some sense, a crucial test of the remedy. The patient, a man in middle life, had long been a victim distorted with tophaceous deposits, and the malady was so far incurable. This was varied, however, at intervals of two or three months with acute attacks, which apparently resisted all the usual remedies, and expended their force in from two or three weeks. I had previously attended him in several of these attacks, and found the common remedies, colchicum, acetate of potash in large doses, etc., of but little avail. I now put him on the permanganate, and had the pleasure of seeing him on the street in seven days.

I find the raspberry syrup to be the best menstruum, as it disguises the somewhat nauseous taste of the medicine completely.—*Detroit Review.*

Presence of Infusoria in the Expired air in Whooping Cough.—Mr. Poulet, in a note to the Academie des Science (Gazette Hebdomadaire), writes as follows: A small epidemic of whooping cough having occurred in the locality where I live, I was induced to examine the vapour expired by several children effected with this malady, reputed contagious by the majority of observers. These vapours arising from the respiration of the little patients, presented a veritable world of infusoria, identical in all cases. The more numerous, which were also the most slender, may be classed with the species described by some under the name of Monas Termo, by others under that of Bacterium Termo. Others in less number moved to and fro in the field of the instrument. They had a form resembling a *bacillus*, slightly spindle-shaped; their length was from two or three-hundredths of a millimetre, their breadth about a fifth as much. This is the species which Muller names Monas

punctum, Ehrenberg, Bodo punctum, and which micrographers habitually class among the Bacteries—Bacterium bacillus. Thus, whooping cough, because of these alterations in the expired air, belongs to the class of infectious maladies, of which I have already studied, from the same point of view, variola, scarlatina, and typhoid fever; and a truth, which the simple observation of facts had already rendered evident, receives from microscopic study complete confirmation.—*Pacific Med. and Surg. Jour.*

Whisky for Hydrophobia.—It is written that a certain Dr. Carter, of Indianapolis, pricked his thumb during the examination of a subject that had died of hydrophobia, and fearing the result, drank an indefinite quantity of whisky. It had the extraordinary effect of causing drunkenness in the first degree, followed by headache. By last accounts no unusual symptoms of hydrophobia had appeared.

The Present Raid on the Uterus.—The following extract from the address of Dr. W. D. Buck, before the New Hampshire Medical Society, is copied from the St. Louis *Medical Reporter*: "The uterus is a harmless, inoffensive little organ, stowed away in a quiet little place. Simply a muscular organ, having no function to perform save at certain periods of life, but furnishing a capital field for surgical operations, and is now-a-days subject to all sorts of barbarity from surgeons anxious for notoriety. Had dame Nature foreseen this, she would have made it iron-clad. What with burning and cauterizing, cutting and slashing, and splitting and skewering, and pessarying, the old fashioned womb will cease to exist, except in history. The transactions of the National Medical Association for 1864 has figured 123 different kinds of pessaries, embracing every variety, from a simple plug to a patent threshing machine, which can only be worn with the largest hoops. They look like the drawings of turbine water wheels, or a leaf from a work on Entomology. Pessaries, I suppose, are sometimes useful but there are more than there is necessity for. I do think this filling up the vagina with such traps, making a Chinese toy-shop of it, is outrageous. Hippocrates said he never would recommend a pessary to procure abortion, nay, he swore he never would.—Were he alive now he would never recommend one at all. If there were fewer abortions there would be fewer pessaries, and if there were fewer pessaries there would be fewer abortions. Our grandmothers never knew they had wombs, only as they were reminded of it by a healthy fœtus; which, by the by, they always held on to. Now-a days even our young women must have their wombs shoved

up, and if a baby accidentally gets in by the side of the machinery, and finds a lodgment in the uterus, it may, perchance, have a knitting-needle stuck in its eyes before it has any. It is the easiest thing in the world to introduce a speculum, and pretend to discover ulceration of the os, and subject a patient to this revolting manipulation once or twice a week, when there is, in fact, nothing the matter. By some practitioners, all diseases which occur in the female are attributed to the uterus. In this class are especially to be included all such as make of the abnormal conditions of the uterus a specialty."

New Sydenham Society.—Dear sir—As Honorary Secretary of the New Sydenham Society, I beg to bring its publication under your notice, and to invite you to enrol yourself as a member.

The Society was instituted for the purpose of supplying certain acknowledged deficiencies in the existing means of diffusing medical literature. Works of a *practical* character and of *permanent* value are selected for publication.

You can acquire the whole of the Works issued by the Society from 1859 to 1867 (35 volumes, including 28 vols. handsomely bound in cloth, gilt, and 7 fasciculi of the Society's Atlas of Portraits of Skin Diseases, embracing more than 20 life-size coloured plates, 18x24 inches), for nine guineas; or you can commence with either the past or the present year.

The subscription is one guinea per annum, payable in advance.

I undertake to receive your annual subscription, and to hand you the book as soon as they are issued.

I am, Dear Sir, truly yours,

Richard J. Dunglison, M. D.,
Hon'y Local Secretary.

Baker Brown's Case.—Considerably over one-fourth of the September number of the *London Lancet* is occupied with the trial of this individual before the Obstetrical Society for his achievements in Clitoridectomy. The session continued from 8 P. M. till midnight, and was not marked by excess of courtesy. Mr. Brown was present and participated in his own defense. The vote stood 194 for "removal," 38 against, and 5 blanks. The report of the discussion is not worth the space it occupies.

A correspondent of the "Medical Record" highly extols creosote as an external anodyne for burns.

Dietetic Information.—Beef tea was first introduced into England, when Henry VIII. dissolved the Pope's Bull.

Dr. Guillan, who was lately called in by Napoleon, declined any fee, saying that "the honor was sufficient for him." However, $2,000 were sent to him; but he made a present of the whole amount to the Academy of Medicine.

The Society for the Prevention of Cruelty to Animals (London), has voted the sum of twenty-five pounds to the Richardson testimonial fund, in consideration of his discovery of the method of producing local anæsthesia.

HERMETIC SEAL.—A mixture of gelatine and glycerine is liquid while hot, but on cooling it becomes solid, retaining considerable elasticity and toughness. The neck of a bottle dipped into this melted compound is covered with an air tight cap, which can be made as thick as desired by repeating the operation.

GLYCERINE IN THE ARTS.—A German chemist, named Pusher, of Nuremburg, reported to the Trades Union of that place, that he had met with success in using glycerine together with glue. While generally, after the drying of the glue, the thing to which it is applied, is liable to break, tear, or spring off, if a quantity of glycerine equal to a quarter of the quantity of glue be mixed with it, that defect will entirely disappear. Pusher also makes use of this glue as lining for leather, for making globe frames, and for smoothing parchment and chalk paper. He also uses it for polishing, mixing wax with the glycerine, and using it as an underground for laying on aniline red color. The red was found to excel all others in which glycerine was not used. The glycerine has also some properties in common with India-rubber, for it will blot out pencil marks from paper, so as to leave no mark whatever. A paste made of starch, glycerine, and gypsum, will maintain its plasticity and adhesiveness longer than any other known cement, and does therefore recommend itself for cementing chemical instruments and apparatus used by pharmacists.—*Journal of Applied Chemistry.*

CHLOROFORM IN OBSTETRICS.—Sir J. Y. Simpson gave as his opinion, at a meeting of the Obstetrical Section of the British Medical Association, that chloroform never caused convulsions, puerperal mania, hæmorrhage, or delayed of labor. "He gave it as soon as weariness from pain occurred, during a pain, and always with the patient in a recumbent position."

MEDICAL NEWS.

"Nulla Dies, Sine Linea."

CHANGES.—The following gentlemen have resigned their repective chairs in the *Long Island College Hospital*—Professors Chapman, Enos and Hutchison.

M. NELATON.—It is not yet officially announced, but it may be stated as certain, that M. Nélaton, the distinguished French surgeon, is about to give in his resignation as a Professor of the Faculty, and to be raised to the dignity of Senator.

The General Hospital in Birmingham, England, has just received the handsome gift of fifty thousand dollars from a gentleman of that City, who refuses to have his name published.

The publication of medical, surgical, and chemical Works is said to be steadily on the increase in all countries. Last year, 1866-7, the medical students in London alone numbered 1355, and were divided amongst the eleven medical schools thus: Guy's, 300; St. Bartholomew's, 245; University College, 200; King's College, 170; St. George's, 90; London Hospital, 75; St. Mary's, 75; Middlesex, 70; St. Thomas's, 60; Charing Cross, 40; Westminster, 30.

Dr. J. V. C. Smith, of Boston, and Dr. J. H. Griscom, of New York, have been adjudged the successful competitors for the "Prize Essay on the Physical Signs of Longevity," for which $500 was offered some time ago by the American popular Life Insurance Company. The essays of these gentlemen were so good that the committee could not determine which was the better, and the prize was awarded to each.

REFRESHED VACCINE MATTER.—Dr. Crociani writes to the *Imparziale*, of Florence, stating that he inoculated the udder of a ten-year-old cow with vaccine matter obtained from the central establishment. He obtained, in due time, beautiful vesicles, the lymph of which, being inoculated to children, had the desired effect.

By the published list of the present members of the North Carolina Medical Society, attached to the Report of the Proceedings at the last Annual Meeting, it appears that the whole number of members is 225; and that of these, 100 graduated at the Medical School of the University of Pennsylvania, 43 at that of the University of New York, and 33 at the Jefferson Medical College, Philadelphia.

The Memory of the late Professor Trousseau is to be revered by the Parisian Academy of Medicine, by his marble bust, which it is proposed to place in their Hall. M. Lasègue has issued an appeal for funds to the pupils and friends of the eminent deceased, for the purpose of carrying out this object.

The Italian government has been the first to recognize by law the devotion and disinterestedness of the medical Profession in their attendance upon cases of cholera. By a recent law the Chambers have provided that an annual pension of four hundred francs shall be paid to the widow, and a thousand francs to the children of any physician who dies from such exposure. The pension of the widow ceases if she marries again, and that of the children on attaining majority.

A New York religious newspaper says that the late Dr. James Jackson, of Boston, was "emphatically the poet and philosopher of the medical Profession"!

Dr. J. Marion Sims has had conferred upon him by the King of Italy the Order of St. Maurice and Lazarus, and by the Queen of Spain he has been named Commander, of the first class, of the Order of Isabel la Catholique, as recognitions of the value of his late medical Work.

Women as Apothecaries.—The Minister of the Interior of Holland has issued a decree admitting women to an examination for the position of assistant apothecaries,—an office hitherto restricted exclusively to men. This measure will enable country doctors to have their prescriptions made up by their wives or daughters, and will thus relieve them from the charges of a male assistant.—*N. Y. Med. Jour.*

Chignons—The scare lately suffered by the wearers of chignons, under the supposition that the specks which appeared on them were developed into lice, seems to have no foundation. It has been ascertained that the speck was due to a fungous growth—a species of torula.

Well Done.—A physican named Furst died lately in Buenos Ayres of cholera, while attending the sick. The government gave him a grand burial, and granted a pension to his family of $120, for ten years, besides charging itself with the cost of educating his children.

Bread and Chignons.—The London papers give an account of an oven, "at 65 Richardson Street," which is used on Sundays to cook the dinners for the poor, and through the week to bake hair and kill the vermin in chignons.—*Pacific Medical and Surgical Journal.*

Poisonous Flies have appeared in a great swarm in Transylvania, and killed more than 100 head of cattle. Men have to resort to tobacco smoke for protection.

The Mother the Best Nurse.—The authorities at Munich for some years past have required that in all cases of children dying in their first year, the parents should declare whether or not the infant had been suckled by the mother. A statistical table of the last two years shows that out of 100 deceased 88 were not so brought up.

Still Another Alkaloid of Opium.—Messrs. T. and H. Smith, of London, have found a new alkaloid in opium, to which they have given the name of Cryptopia. These chemists, however, obtained only five ounces of the muriate of crpytopia from out of four tons of opium. The primary form of the crystals is a hexagonal prism. The chemical formula is as follows: $C^{23}H^{25}O^{5}N$.

Darwin's Theory of the Animal Scale.—Professor Bischoff, of Munich, has recently received numerous skulls of ourang-outang, chimpanzee, and gorilla, and comes to the conclusion that Darwin has failed to prove the ascent of man from the monkey.

Making Sea-Sand Productive.—Another experiment has been made in England to ascertain the effect of sewage manure upon sea-sand, which, according to Liebig, would never yield a crop. The metropolitan sewage company became tenants of ten acres of land at Barking, upon which bricks had been made. On one acre of the ten, 4,000 loads of the Maplin sands were spread to the depth of two feet. On this grass and wheat were sown, with an admixture of the sewage, and the result was a healthy and productive crop. This year the whole of the ten acres, for which the company paid £1 an acre, is laid down in grass, and has been re-let to a London dairyman at £13 10s. the acre, the company supplying their tenant with sewage to the amount of 50s. per acre.—*N. Y. Evening Post.*

Anatomical Research by a New Method.---Prof. Braune, of the University, Liepsic, has just published a method of making accurate drawings of the human system, which is at once novel and startling. He first freezes the subject to a metallic hardness, by exposing it to a temperature many degrees below zero for a sufficient period of time, then with a fine saw he severs the frozen body in any direction as may be desired. If proper saws are used, these cuts will be perfectly clean and smooth; over these cuts a stream of water is poured, which instantly freezes, as the whole operation is carried on in a room at a low temperature, and the ice forms a sort of transparent coating to the severed surface, revealing very distinctly every part and outline.—*Chem. News.*

A New Work.—Darwin, whose "Origin of the Species" created somewhat of a sensation in the scientific world, has a new book in press, entitled, "The Variation of Animals and Plants under Domestication." The Work, which will elucidate the principles of inheritance, reversion, crossing, interbreeding, and selection, will be published by Murray, of London, and will consits of two octavo volumes.

Longevity in England.---Among the deaths registered in England in the year 1865, there were twenty-one men and sixty-eight women above a hundred years old, viz.: five men and twenty-five women, aged one hundred; four men and fifteen women, aged one hundred and one; five men and eleven women, aged one hundred and two; three men and four women, aged one hundred and three; one man and seven women, aged one hundred and four; two men and four women, aged one hundred and five; one woman, aged one hundred and six; one man and one woman, aged one hundred and ten.

EDITORIAL.

"Nullius Addictus Jurare in Verba Magistri."—Hor.

In reading "A Report on the Cases of Epidemic Cholera treated at Madras," and published in a number of the *Madras Quarterly Journal*, recently received, there are so many interesting facts and personal experiences detailed, that a brief analysis, in this connection, will, it is believed, be generally useful.

In the first place, the per centage of deaths is not found to differ materially among the natives and Europeans—being less among the latter. The general death rate was about 56·52 and the per centage of recovery about 43·47.

The mortality is greatest in the first five years of life, when it decreases until the period of puberty, rising at this time from 40 to 70 per cent. As this critical period passes, the mortality decreases; the lowest rate being at the time that there is perfect development and vigour, or between the thirty-fifth and fiftieth year of life.—After this, there is again and consecutively an increased death rate, this culminating, at the period of extreme old age.

While hygienic influences were conspicuously manifest in modifying and mitigating the disease, this (contrary to the experience and valuable researches of Mr. Glashier, in the London epidemics,) was not influenced by prevailing meteorological conditions, but, on the contrary, seemed equally virulent, when the most favourable atmospheric conditions existed. The barometer showed but little variation from the average atmospheric pressure. The humidity was from 4° to 7° below the average of the last twenty years. The rainfall was very deficient, only 0·316 of an inch had fallen during the year or a deficiency of 6·35 inches. The temperature was high. The velocity of the wind unusually great. High temperature being excepted, such meteorological conditions were exactly those usually accepted as most favourable to health, and most calculated to prevent or mitigate the disease.

The difference of season seemed to reverse the death-rate; in July, the death-rate was 59·25, and the rate of recovery 40·75,

while in Autumn the death-rate was only 33·33 and the per centage of recoveries was 66·66.

The whole or average per centage of recoveries was 54·38 and that of deaths 45.61—a result conspicuously different from that which existed at Madrid, before a more enlightened system of management prevailed.

In very few cases was there any premonitory diarrhœa. Rice-water discharges and the suppression of urine set in generally without the previous diarrhœa. As this premonitory diarrhœa was often absent in the last American epidemic, the reasonable inference or deduction is, that authors are too positive in regard to their teachings upon this subject. Such experiences teach Physicians their error and the necessity for greater precaution, in always expecting this symptom, prior to the existence of a grave pathological condition in a choleraic patient.

From some reason, not mentioned, a larger number than usual recovered, after the supervention of coma. In one table 33 per cent. recovered, after the existence of this condition. Is our prognosis in regard to coma in cholera to be modified or to be less positive, after a knowledge of such facts?

The doctrine of contagion seems to be generally accepted in India. The writer states, that he never had a doubt upon this subject, until he read Dr. Aitken's Work, in which other testimony is given by Physicians in that country. It is a familiar fact, that the disease had been propagated by regiments encamping upon ground previously occupied by others, among the members of which cholera had prevailed. The contagiousness of the disease is so generally accepted or assumed, that Physicians and Students are indisposed to make examinations of the dead.

In regard to the interesting subject of treatment, the results are conspicuously in favour of a combination of food, with hot stimulants. After using calomel, in small doses and at short intervals, the writer states, that he attributed, for a long time, the appearance of biliary matter in the stools, to the action of this medicine, but subsequent experience led him to correct this "notion," for he found, that "when no calomel was given, the greenish biliary stools were the first indication of the disease having yielded, and these

were often speedily followed by a free flow of urine." The food given, with stimulants, was usually farinaceous in character; sometimes weak animal broths. The stimulants were given frequently, but in small quantity, at each time.

The castor oil, or eliminative treatment, was more than a failure, and usually made the patients worse, by increasing nausea and vomiting and inducing an avoidable prostration.

For the control of obstinate vomiting, in addition to the use of effervescing draughts, so acceptable and beneficial in this disease, particularly happy effects were obtained from the use of the following mixture:

℞.—Creosoti gtt. viij.
Chloroformi Spt. ℥ij.
Acid Hydroscyanic Delut. (Scheele) gtt. xvj.
Syrupi ℥ij.
Mistura Acaciæ ℥ss.
Aquæ Font. ℥iij.

M. ft. mist.

S.—A fourth part every hour or two.

For obstinate hiccup, with vomiting, after all remedies had failed, uniformly good results were obtained by applying a blister over the scrobiculus cordis and dressing the denuded surface with muriate of morphia, commencing with a sixth of a grain and gradually increasing this quantity.

Where premonitory diarrhœa existed, it was most promptly checked, by giving 30 to 60 minims of diluted sulphuric acid, in two ounces of peppermint water, every two hours, and adding, if necessary, 15 to 30 minims of laudanum to each dose.

Dry heat was used, with the best of results, while moist heat was found to be prejudicial.

The saline and emetic treatment did not produce good results.

Relief of thirst was most easily obtained, by repeated enemata of warm beef tea, to which were added small quantities of brandy.

Suppression of urine, after the use of sinapisms, hot stupes, etc., proved ineffectual, was uniformly treated beneficially, by dry cupping

over the spine. The urine frequently made its appearance, when the cups were in situ.

Where urœmic poisoning occurred, this was treated first by active purgation and then with nitrous ether, combined with small doses of quinine—the administration of solid food being suspended.

Dyspnœa was treated best, by counter-irritation over the thorax, with the use of nervous stimulants—valerian, ether, etc. The theory of Dr. Johnson, that this dyspnœa depends upon or is due to spasm of the ultimate branches of the pulmonary artery, did not find favour. On the contrary, the diaphragm seemed to be chiefly affected, as the respiration was costal and costo-superior.

Pregnancy did not seem to exert any manifest influence upon the disease, and those in the pregnant condition did not suffer more than others; no abortions resulted. Parturition was easy and safe, after the disease had recently ceased, the period of gestation not having been abridged by it.

Lactation was not suspended during acute attacks of the disease; on the contrary, the mammæ were distended unusually and belladona liniments had to be used, for the relief of this condition. One woman suckled her child during her entire sickness, without injurious results to mother or child.

Menstruation was not materially affected. Several women menstruated immediately upon recovery; some stated that the period was anticipated; some that it was delayed. "One girl menstruated, for the first time, after recovery from a comatose condition."

Hæmorrhages from the bowels or vagina were not seen and epistaxis occurred in only one case.

Every patient on admission was placed on a taped cot, the tape being so arranged as to afford a convenient aperture for the passage of the dejections. Clean vessels were supplied for the reception of the discharges (from both stomach and bowels) first passed after coming to Hospital. When the nature of the evacuations had been ascertained, by inspection, by a competent person, the vessels used during the remainder of the illness were dusted freely, with McDougall's powder (a mixture of carbolate and sulphate of lime with some free lime). Immediately after inspection, the discharges were buried, or thrown into a hole and covered with a layer of fresh earth. McDou-

gall's powder was freely sprinkled under the cots and on the tape and bed-clothes with which the patients were supplied. Thus the atmosphere of the wards was strongly impregnated with the peculiar odour of the disinfecting powder; this had a decidedly beneficial effect upon the patients, and, as before remarked, it may be that it had some effect in preventing the spread of the disease to the friends and attendants of the sick.

The clothes which patients brought with them to Hospital were taken from them, steeped in a tub of water through which a quantity of McDougall's powder had been diffused, and then well washed and stowed in a separate chamber until required.

The principal and most interesting features of this report have thus been given, as briefly as possible. Some of the information is generally familiar, while much is novel and suggestive. Facts based upon such experience and obtained where cholera is endemic are certainly worthy of careful observation and scientific study.

☞ Special Notice.—It often happens to the busy Practitioner, that while he is unable to make a careful review of the history and pathology of any disease which has been presented to him in an important or unusual form, he can easily spare the time necessary for communicating by letter all of the interesting facts, in connection with one or more of his cases.

It will have been observed, in recent issues of the Journal, that this has been done, and such letters having been published, have aroused interest and attention; indeed, there is no portion of a Journal which is more generally and profitably read. It is requested, therefore, that all Physicians, if indisposed to write a formal article, based upon their practice, will communicate by letter an account of all that may have interested them. Such letters are fully appreciated by readers, and will be published with pleasure.

NOTICES.

☞ The Index of the Richmond Medical Journal, for the year 1867, will be mailed with the number for January, 1868.

☞ Special Instruction in Medical Science.—In compliance with the desire of the Profession, as indicated by the resolutions of the Convention of Teachers at Cincinnati in May last, unanimously endorsed by the American Medical Association at its subsequent meeting, that the Standard of Medical Education in this country should be raised and its limits extended, the following gentlemen have associated themselves together for the purpose of giving instruction in their respective departments to advanced students and to physicians who may be desirous of fitting themselves for special practice.

The courses will be delivered during the Winter term of the Medical College, at such hours as will not interfere with the collegiate curriculum.

At the Summer session it is intended, with the assistance of additional instructors, to cover the whole range of legitimate specialties.

Fee for each course, $25. The classes will be limited, and certificates of attendance will be issued at the close of the term.

Henry G. Clark, M. D., (Bowdoin College) Surgeon to the Massachusetts General Hospital—Lecturer on Public Hygeine and Medical Jurisprudence. Horatio R. Storer, M. D., (Harvard University) Pupil of Simpson, of Edingburg, and Professor in Berkshire Medical College—Lecturer on the Diseases of Women. Prof. Storer's course the present Winter, will be upon Uterine Diagnosis; and will be exclusive of that upon the Surgical Diseases of Women, to be delivered in December. Gustavus Hay, M. D., (Harvard University) Pupil of Arlt, of Vienna, and Surgeon to the Eye and Ear Infirmary—Lecturer on Operative Ophthalmology. B. Joy Jeffries, M. D., (Harvard University) Pupil of Hebra, of Vienna; Lecturer in Berkshire Medical College, Surgeon to the Eye and Ear Infirmary, and Physician to the Boston Dispensary—Lecturer on the Diseases of the Skin. Josiah H. Stickney, M. D., F. R. C. V. S., (Harvard University) Pupil of Varnell, of London—Lecturer on Veterinary Medicine and Surgery. Thomas B. Hitchcock, M. D., (Harvard University) Lecturer on Diseases of the Teeth. Francis C. Ropes, M. D., F. R. C. S. E., (Harvard University) Pupil of Langenbeck, of Berlin; Physician to the Boston Dispen-

sary, and Surgeon to Out Patients at the City Hospital. Lecturer on Surgical Deformities. Samuel W. Langmaid, M. D., (Harvard University) Pupil of Mackenzie, of London, and Physician to the Boston Dispensary—Lecturer on Diseases of the Throat. David F. Lincoln, M. D., (Harvard University) Pupil of Wilderhofer, of Vienna, and District Physician to the Boston Dispensary—Lecturer on the Diseases of Infants and Children. Joseph G. Pinkham, M. D., (Long Island College Hospital) Pupil of Bloxam, of London, and Professor of Chemistry in Berkshire Medical College—Lecturer on Toxicology. Francis B. Greenough, M. D., (Harvard University) Pupil of Zeissl, of Vienna—Lecturer on Venereal Diseases. Geo. F. H. Markoe, Member of the American Pharmaceutical Association—Lecturer on Practical Pharmacy. Applications for tickets to be made to Dr. H. R. Storer, Hotel Pelham, Boston, Mass.

☞ In future, all letters received will be answered in the succeeding number of the Journal. Where the correspondence is of immediate importance, an exception will be made, it being requested that, in such cases, a stamp shall be enclosed by the writers.

☞ Fifty cents will be paid for every October (1867) number of this Journal.

☞ The Editors of this Journal, after fairly trying a liberal policy, for the convenience of many whom the late war left without pecuniary resources, are compelled to adopt a complete and permanent change.

The credit system, under any circumstances, is hereafter abandoned. Apart from its risks, which may be successfully borne, it entails an enormous correspondence upon the Editors, and this painful, expensive, and often fruitless labour, can no longer be performed.

Notice is then given, that no number of future volumes can be furnished to any one, unless the amount of subscription is sent with the order. When the period of any subscription terminates, the Journal will be discontinued, unless the amount due for its continuance is forwarded.

The fact that the number who pay promptly is sufficient to fully sustain the Journal, when it is not sent to unremunerative subscribers, and the unwelcome experience in regard to those who have not appreciated a credit extended to them, induce the Editors to adopt this course.

To all, the Journal will hereafter be furnished, only on the terms specified.

☞ This number terminates the second year and fourth volume of the Richmond Medical Journal. The extreme difficulties attending the success of a medical periodical (which manifestly depends for its success upon a small per centage only of every population) is, proverbially, well known, but the pecuniary prostration of the South, with the manifest monied depression at the North, has conspicuously increased these difficulties.

This Journal has passed through years which have caused the suspension of many publications and tried the resources of the best, oldest, and most stable Periodicals in America.

It is desired to further develop and improve each of the several departments of this Work, and by thus increasing its reasonable claims, to the support of the Profession, to ensure its enlarged circulation.

After all that can be accomplished, however, by the most careful management, the improvement and increased dissemination of the Journal must depend not only upon the support of its subscribers, but upon the personal as well as professional influence of each.

A respectful appeal is therefore made to all subscribers to give this aid and to induce their Professional friends to join them in a work which will be most fully appreciated, and which it is hoped, will not be regretted by any who are kind enough to undertake it. All who are now subscribers are asked to forward their renewed subscriptions during the month of December, as it is important to know what number of copies will be necessary for the January issue.

☞ Short Articles.—It is requested, that articles contributed for this Work, should be brief and practical. With few exceptions, long communications are distasteful to readers and are generally neglected; it is difficult to make room for them. Papers of merit are retained for many months, when, if the valuable truths contained were briefly presented, they would be promptly published. It is the desire of the Editors of this Journal to increase, relatively, the Eclectic Department, and, to effect this, original papers of limited extent are preferable.

☞ Where manuscript is sent to the Editors of this Journal, all writers are respectfully requested to state whether remuneration is desired.

There is such a difference in the intention of those writing for this Work, that it is necessary to make this request.

☞ NOTICES TO SUBSCRIBERS, ADVERTISERS, CONTRIBUTORS AND CORRESPONDENTS.

Receipts for all amounts transmitted, will be sent in the Journal, for the succeeding month.

It is desired to obtain for this Journal one Agent in every City and Town.

All communications sent by mail should be directed to Dr. E. S. Gaillard, Locked-Box 32 Richmond, Va.

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Contributions for publication must bear the signature of the writer, and must be communicated to this Journal exclusively.

Original articles should be written on one side only of each sheet, and the manuscript should be, by the sign (¶), divided into paragraphs.

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☞ This Journal is published as a Monthly octavo of ninety-six pages. It is now the largest Medical Monthly issued in America.

The Editors offer to pay, at the HIGHEST JOURNAL RATES, for ARTICLES, ESSAYS, CORRESPONDENCE and REVIEWS OF RECENT WORKS.

The terms of this Journal have been changed; see notice on the cover.

ANSWERS TO CORRESPONDENTS.

T. T. J., Blacksburg.—Money not received. Have not heard from the Col.

V. C. H., Max Meadows.—Can supply you with all of the Journals desired (the numbers for October, 1866, and October, 1867, excepted) at $6.00. Essay on Diphtheria has been mailed to you.

R. F. S., Sumter.—Letter received. Hope soon to hear from you. Request observed.

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J. J. C., Charleston.—Letter received too late to observe the request contained.

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C. L. M.—Letter received. Would do what is desired, with pleasure, but to be impartial have been compelled to avoid such a course, in regard to all who advertise.

J. C. M., Hernando.—Letter received. Your accepted manuscript, during a long and necessary absence, has been misplaced. Will be published when found.

A. M. F., Staunton.—Letter received. Send your article for the January number.

G. S. B., New York.—Will look, with pleasure, for the fulfilment of your promise. Thank you.

W. D. M., Shelby Co., Ky.—Article accepted.

P. P. P.—Letter received. You are correct.

BOOKS AND JOURNALS RECEIVED.

Synopsis of the Course of Lectures on Materia Medica and Pharmacy, delivered in the University of Pennsylvania. With five lectures on the modus operandi of medicines. By Joseph Carson, M. D. Fourth edition revised. Philadelphia. Henry C. Lea. 1867. From the Publisher.

A Treatise on Therapeutics and Pharmacology or Materia Medica. By George B. Wood, M. D., President American Philosophical Society, President Col. Phys. of Philadelphia, Emeritus Prof. Theory and Practice Medicine in the University of Pennsylvania, one of the authors of the U. S. Dispensary, author of a treatise on the Practice of Medicine, etc. Third edition. In two volumes. Philadelphia. J. B. Lippincott & Co. 1868. From the Author.

The Teeth: Their Disease and Treatment. By J. P. H. Brown, Dentist. Augusta, Ga. Illustrated. Chronicle and Sentinel Office. 1867. From the Author.

The Madras Quarterly Journal of Medical Science. October, 1866. January, 1867. June, 1867.

Transactions of the Medical Society of the State of Pennsylvania, at the Eighteenth Annual Session. Held at Pittsburg, June, 1867. Philadelphia. Collins, Printer. 1867.

Clinical Lectures on the Principles and Practice of Medicine. By J. Hughes Bennet, M. D., F. R. S. E. Edinburg. Fifth American Edition. New York. Wm. Wood & Co. 1867. From Publishers.

Studies in Pathology and Therapeutics. By Samuel Henry Dickson, M. D., L. L. D. Philadelphia. Wm. Wood & Co. New York. 1867. From Publishers.

The Medical Use of Electricity. By Geo. M. Beard, M. D., and A. D. Rockwell, M. D., Wm. Wood & Co. New York. 1867. From Publishers.

Orthopedics: A Systematic Treatise upon the Prevention and Correction of Deformities. By David Prince, M. D. Lindsay & Blakiston. From Publishers.

Surgical Operations and Appliances. By Philip S. Wales, M. D., Surgeon U. S. A. Philadelphia. Henry C. Lea. 1867. From Publishers.

The following domestic Exchanges are regularly received:

The Atlanta Medical and Surgical Journal, Ga.
Boston Medical and Surgical Journal, Mass.
Braithwaite's Retrospect, New York.
Buffalo Medical and Surgical Journal, New York.
Chicago Medical Journal, Illinois.
Chicago Medical Examiner, Illinois.
Cincinnati Lancet and Observer, Ohio.
Druggist's Circular and Chemical Gazette, Philadelphia, Pa.
Galveston Medical Journal, Texas.
Journal of Applied Chemistry, Philadelphia, Pa.
London Lancet—Reprint—New York.
New York Medical Record, New York.
New Orleans Medical Journal, Louisiana.
New York Medical Journal, New York.
Pacific Medical and Surgical Journal, San Francisco, California.
St. Louis Medical and Surgical Journal, Missouri.
Southern Journal of the Medical Sciences, New Orleans, Louisiana.
Southern Medical and Surgical Journal, New Orleans, La.
The American Journal of Pharmacy, Philadelphia, Pa.
The American Journal of Medical Sciences, Philadelphia, Pa.
The Dental Cosmos, Philadelphia, Pa.
The Detroit Review, Mich.
The Medical and Surgical Reporter, Philadelphia, Pa.
The St. Louis Medical Reporter, Mo.
The Western Journal of Medicine, Indianapolis, Ind.
The Journal of Materia Medica, Lebanon, N. Y.
The Leavensworth Medical Herald, Kansas.
The American Journal of Dental Science, Baltimore, Md.
The Quarterly Journal of Psychological Medicine, N. Y.
The Medical Gazette, New York.

FOREIGN EXCHANGES.

The London Lancet.
The Ophthalmic Review, London, Eng

The Medical Mirror, London.
The Canada Medical Journal, Montreal.
The Dublin Quarterly Journal of Medical Sciences, Ireland.
Le Mouvement Medicale, Paris, France.
Journal de Medicine Mental, Paris, France.
Revue Medicale, Paris, France.
Revue de Therapeutique Medico, Chirrugicale, Paris, France.
The Medical Press and Circular, Dublin, Ireland.

MISCELLANEOUS.

The American Naturalist, Salem, Mass.
De Bows' Review, 80 Broadway, New York.
Richmond Eclectic, Va.
The Planter, Richmond, Va.
The Farmer, Richmond, Va.
Littell's Living Age, Boston, Mass.

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